DOCUMENT RESUME

ED 411 657 EC 305 849

| | |
|---|---|
| AUTHOR | Gerber, Paul J. |
| TITLE | The Efficacy of the Collaborative Teaching Model for Academically-Able Special Education Students: A Research Report. |
| INSTITUTION | Metropolitan Educational Research Consortium, Richmond, VA. |
| PUB DATE | 1996-01-00 |
| NOTE | 101p. |
| PUB TYPE | Reports - Research (143) -- Tests/Questionnaires (160) |
| EDRS PRICE | MF01/PC05 Plus Postage. |
| DESCRIPTORS | Delivery Systems; *Disabilities; Elementary Secondary Education; Interviews; Models; *Parent Attitudes; *Regular and Special Education Relationship; Staff Development; Student Attitudes; *Teacher Attitudes; *Teacher Collaboration; *Team Teaching |

ABSTRACT

This study investigated the efficacy of collaborative teaching in serving students with disabilities at all educational levels. Interviews were conducted with 14 building administrators, 103 general and special education teachers, 32 parents of general education students, 37 parents of special education students, and 53 general and 70 special education students from five school divisions. Findings from the research indicate that overall, the collaborative teaching program received high marks from all who were interviewed. Respondents expressed satisfaction with the positive results shown thus far. Scheduling, administrative support, planning time, training, and multiple service delivery options were seen as key to program success. Whereas the model proved to be efficacious, there were a number of remedial efforts that respondents felt could be instituted to upgrade the entire collaborative system, including greater attention to class composition (including number of students with disabilities and the severity of the disabilities); more effective staff development; better efforts to inform parents about the program; and assurance of program continuation throughout the grades. The report discusses the results and presents ten general recommendations and five training recommendations for collaborative teaching. Appendices contain interviewing materials. (CR)

********************************************************************************
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
********************************************************************************

ED 411 657

# The Efficacy of the Collaborative Teaching Model for Academically-Able Special Education Students: A Research Report

METROPOLITAN EDUCATIONAL RESEARCH CONSORTIUM

MERC

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY
G. Hipp

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

**CHESTERFIELD COUNTY PUBLIC SCHOOLS • COLONIAL HEIGHTS CITY SCHOOLS • HANOVER COUNTY PUBLIC SCHOOLS • HENRICO COUNTY PUBLIC SCHOOLS • HOPEWELL CITY PUBLIC SCHOOLS • POWHATAN COUNTY PUBLIC SCHOOLS • RICHMOND CITY PUBLIC SCHOOLS • VIRGINIA COMMONWEALTH UNIVERSITY**

EC305849

BEST COPY AVAILABLE

# METROPOLITAN EDUCATIONAL RESEARCH CONSORTIUM

PO BOX 842020 • RICHMOND VA 23284-2020 • Phone: (804) 828-0478 •
FAX: (804) 828-0479 • E-MAIL: jpisapia@EDUNET.SOE.VCU.EDU

Virginia Commonwealth University and the school divisions of Chesterfield, Colonial Heights, Hanover, Henrico, Hopewell and Richmond established the **Metropolitan Educational Research Consortium** (MERC) on August 29, 1991. The founding members created **MERC** to provide timely information to help resolve educational problems identified by practicing professional educators. **MERC** membership is open to all metropolitan-type school divisions. It currently provides services to 7,000 teachers and 120,000 students. **MERC** has base funding from its membership. Its study teams are composed of University investigators and practitioners from the membership.

**MERC** is organized to serve the interests of its members by providing tangible material support to enhance the practice of educational leadership and the improvement of teaching and learning in metropolitan educational settings. **MERC**'s research and development agenda is built around four goals:

- To improve educational decision-making through joint development of practice-driven research questions, design and dissemination,
- To anticipate important educational issues and provide leadership in school improvement,
- To identify proven strategies for resolving instruction, management, policy and planning issues facing public education, and
- To enhance the dissemination of effective school practices.

In addition to conducting research as described above, **MERC** will conduct technical and issue seminars and publish reports and briefs on a variety of educational issues.

**MERC MEMBERSHIP**
John Pisapia, Director

**CHESTERFIELD COUNTY PUBLIC SCHOOLS**
Thomas R. Fulghum, Superintendent

**COLONIAL HEIGHTS CITY SCHOOLS**
James L. Ruffa, Superintendent

**HANOVER COUNTY PUBLIC SCHOOLS**
Stewart D. Roberson, Superintendent

**HENRICO COUNTY PUBLIC SCHOOLS**
Mark A. Edwards, Superintendent
Chairman, MERC Policy & Planning Council

**HOPEWELL CITY PUBLIC SCHOOLS**
David C. Stuckwisch, Superintendent

**POWHATAN COUNTY PUBLIC SCHOOLS**
Margaret S. Meara, Superintendent

**RICHMOND CITY PUBLIC SCHOOLS**
Patricia C. Conn, Superintendent

**VIRGINIA COMMONWEALTH UNIVERSITY**
John S. Oehler, Dean
School of Education

BEST COPY AVAILABLE

# The Efficacy of the Collaborative Teaching Model for Academically-Able Special Education Students: A Research Report

Submitted by:

Paul J. Gerber, Ph.D.
Professor
Virginia Commonwealth University
January, 1996

# The Efficacy of the Collaborative Teaching Model for Academically-Able Special Education Students: A Research Report

## Table of Contents

Executive Summary

Background

METHODOLOGY . . . . . . . . . . 1
Sample . . . . . . . . . . 2
Procedures . . . . . . . . . . 4
Delimitations of the Research . . . . . . . . . . 5
Data Analysis . . . . . . . . . . 5

RESULTS

Section One: Principals and Building Administrators . . . . . . . . . . 7
Section Two: Collaborative Teachers . . . . . . . . . . 19
Section Three: Students . . . . . . . . . . 38
Section Four: Parents . . . . . . . . . . 44
DISCUSSION . . . . . . . . . . 51
GENERAL RECOMMENDATIONS . . . . . . . . . . 59
TRAINING RECOMMENDATIONS . . . . . . . . . . 63

REFERENCES

APPENDIX A

APPENDIX B

## Collaborative Teaching Study Group

Paul J. Gerber, Ph.D., Research Director
Virginia Commonwealth University

---

Elaine Church
Powhatan County Schools

Cindy Foust
Henrico County Schools

Kristen McPeak
Virginia Commonwealth University

Laura Miles
Chesterfield County

Marti Nigrelli
Hanover County

Pat Parrott
Chesterfield County

Lynn Thorpe
Henrico County Schools

Donald Schmidt
Colonial Heights Schools

Janie Smith
Chesterfield County

Cheryl Webb
Hopewell City Schools

Christine White
Hopewell City Schools

# The Efficacy of the Collaborative Teaching Model for Serving Academically-Able Special Education Students: A Research Report

## Executive Summary

### Purpose of the Study

Collaborative teaching is a model of teaching students with disabilities who are academically-able in general classes. This service delivery model is unlike paradigms of the past that denoted least restrictive placement (i.e. resource room instruction and mainstreaming). This model is predicated on direct services in general classrooms where both special education and general education teachers team teach in order to meet the needs of students with disabilities. The model is being used more and more across the country, and it is gaining favor in school divisions in the greater Richmond area. The purpose of this study was to investigate the efficacy of the collaborative model in serving students with disabilities at all educational levels.

### Methods

A qualitative research design was utilized to gather and analyze information on the collaborative teaching process. Eight focus groups sessions were held in each of the ten schools that participated in the study. Individuals who were interviewed had experience with the collaborative teaching model. They were: building administrators, general and special education teachers, parents of general and special education students, and general and special education students from five school divisions. In total 307 individuals participated in the interviews representing elementary, middle and high schools.

### Findings

Overall, the collaborative teaching program gets high marks from all who were interviewed. Respondents expressed satisfaction with the positive results shown thus far. Scheduling, administrative support, planning time, training and multiple service delivery options were seen as key to program success. Whereas the model proved to be efficacious there were a number of remedial efforts that could be instituted to upgrade the entire collaborative system. Among those included were: greater attention to class composition (including number of students with a disability and severity of disability), more effective staff development, better efforts to inform parents about he program, and assurance of program continuation throughout the grades.

### Recommendations

Ten general recommendations and five training recommendations were generated from the study. These were compiled by a research study group of collaborative teachers and administrators after a complete review of the results of the study.

## Background

Collaborative teaching is the latest attempt to integrate students with disabilities into general classrooms. It is a departure from past practices because direct service delivery was predicated on a "pull-out" rather than "keep-in" model. As a result of the collaborative model general and special educators are working together in new and innovative ways to meet the educational needs of special education students who are academically-able, those primarily in the high incidence category of learning disabilities. Collaborative teaching is part of the field's move toward inclusion. It should not, however, be considered synonymous with the concept of "full inclusion", which has different administrative and instructional goals and objectives and accompanying program resources.

In a collaborative teaching arrangement the expertise of teachers are viewed as complementary - the regular educator shares expertise in all aspects of curriculum, effective teaching and large group instruction. The special educator contributes knowledge in such areas as learning styles and strategies, clinical teaching, and behavior management (Parrott, Driver & Eaves, 1992). Over time, expertise of the teachers becomes coincidental. A popular definition of collaborative teaching explains the process.

> "Collaborative teaching is an educational approach in which general and special educators work in co-active and coordinated fashion to teach jointly heterogeneous groups of students in educationally integrated settings i.e. regular classrooms).... In cooperative teaching both general and special educators are simultaneously present in

> the classroom, maintaining joint responsibilities for specified instruction that is to occur within that setting (Bauwens, Hourcade & Friend, 1989, p.18).

Collaborative teaching is very complex in nature because it is a system of instruction and interaction. There are many elements that can have a bearing on whether or not it is successful, both in and outside the classroom. While much has been written about the collaborative teaching model to date, there has been relatively little research done to investigate its effects and efficacy. There has been conjecture as to what makes it successful but little systematic investigation. The available data so far have shown positive views from teachers, students and parents. It is reported that collaborative classes show academic viability, augmented self-esteem, and less social stigma among collaborative students and general parental satisfaction with the collaborative teaching model (Affleck, Madge, Adams & Lowenbraun, 1988; Lowenbraun, Madgem & Affleck, 1990; Madge, Affleck & Lowenbraun, 1990). Now that collaborative teaching is being used more and more in school districts across the country it is important to research this area in-depth and from multiple perspectives. This research effort does just that.

# Methodology

## Sample

The sample was taken from the seven school divisions of the Metropolitan Educational Research Consortium (MERC). In total, five school divisions participated, which provided a variety of urban, suburban, and rural schools.

The schools that were studied were four elementary, four middle, and two high schools that had collaborative teaching programs for at least two years. Two schools (an elementary and middle school) from two separate but adjoining school divisions were interviewed included, but only their administrators and teachers were interviewed in the data collection. The ten schools provided specific research groups for the researchers. They were administrators (principals and assistant principals or coordinators of special education programs);general and special education teachers who worked in collaborative teams; parents of regular and special education students; and students themselves, both general and special education.

Principals and administrators were interviewed via a direct interview format. All other groups participated through focus group interviews and were interviewed separately. Typically, each school yielded six separate interview sessions. Numbers of interview participants in each school are shown in Table 1.

Table 1. Participants in Interviews Per School

| | administrators | | general | special | general | special |
|---|---|---|---|---|---|---|
| schools | administers | teachers | students | students | parents | parents |
| elementary #1 | 2 | 8 | 5 | 8 | 8 | 8 |
| elementary #2 | 1 | 5 | 5 | 5 | 0 | 4 |
| elementary #3 | 1 | 12 | 10 | 17 | 6 | 4 |
| elementary #4 | 1 | 8 | 0 | 0 | 0 | 0 |
| middle #1 | 2 | 10 | 6 | 6 | 2 | 5 |
| middle #2 | 1 | 18 | 4 | 4 | 5 | 3 |
| middle #3 | 1 | 14 | 10 | 10 | 6 | 6 |
| middle #4 | 1 | 8 | 0 | 0 | 0 | 0 |
| high #1 | 2 | 12 | 8 | 10 | 3 | 5 |
| high #2 | 2 | 8 | 5 | 10 | 2 | 2 |
| ——total | 14 | 103 | 53 | 70 | 32 | 37 |

In total, 307 individuals participated in the interviews in the schools of the study.

All interviews were audio taped with participants' consent. Audio tapes were transcribed verbatim for data analysis. Average length of administrators' interviews was 45 minutes, collaborative teachers 90 minutes, students 25 minutes, and parents 30 minutes. Prior to being visited, schools were asked to fill out a questionnaire listing such items as demographics, breakdown of disability categories, school characteristics, and history of their collaborative teaching program. The average number of years participating schools have had their collaborative teaching programs is 3.89. Elementary schools have the collaborative teaching program in grades two through five in all subjects; middle schools in grades six through eight in English, math science, and social studies; and high schools in science, math, English, and social studies.

In the elementary schools the average percentage of special education students served in the collaborative teaching program was 66 percent with a range of 30 to 88 percent; in middle schools, 72.3 percent with a range from 13 to 90 percent; and high schools, 50 percent with a range from 46 to 55 percent.

In elementary schools the average percentage of special education students in classes with general education students was 32 percent, with a range of 25 to 45 percent; in middle schools, 34.5 percent, with a range from 33 to 37 percent; and high schools 17 to 33 percent.

The average percentage of general education teachers involved in the collaborative teaching program was 23.3 percent, at the elementary level, with a range of 13 to 40 percent; 25.3 percent at the middle school level with a range of 13 to 48 percent; 7 to 15 percent at the high school level. The average percentage of special education teachers participating in the collaborative teaching program at the elementary level was 66.7 percent, range 40 to 80 percent; 75 percent at the middle school level, range 55 to 90 percent; and 40 to 70 percent at the high school level.

The schools in this study had a diversity of training experiences with respect to the collaborative model. The most common training experiences were attending conferences and professional workshops, some sponsored by their school division. Other teachers read articles and observed in schools which had collaborative classrooms. Not all teachers were trained prior to working collaboratively. New teachers often received on-the-job-training and then got formal training throughout the school year. It was not uncommon for them to have a working knowledge of collaborative teaching through university course work.

The schools in the study had a diversity of students with disabilities. The vast majority of schools had students who were learning disabled with fewer students with, emotional disturbance and mental retardation. Other disabilities served in select schools of the study were severely disabled, orthopedically disabled (their designation), traumatic brain injury, developmentally disabled, speech impaired, multi-categorically disabled, and other health impaired. It should be noted that learning disabilities was the predominant disability category served in collaborative classrooms.

**Procedures**

The study was guided by a study group comprised of representatives from the participating school divisions and a university-based research director. There were general and special educators who worked on collaborative teams, administrators, and school division special education consultants. The study group designed the study. They selected the groups to be interviewed and devised the instrumentation. All questions in the focus group interviews and the interview for administrators were generated consistent with the available collaborative teaching literature (including all existing research literature) and a practical working knowledge of the collaborative teaching process.

Interviews were conducted in the second half of the 1994-95 school year. This was done to allow the collaborative teaching system in each school to develop and for teams to become organized around a new set of students and schedules. All interviews except for the student interviews were conducted by the university-based research director. The student interviews were done by a graduate student who was skilled in the area of group interviewing skills.

### Instrumentation

Interview protocols were developed for specific research populations included in the study. Each group - administrators, teachers, parents, and students - had specifically targeted questions. Examples of the instrumentation developed for each group are included in Appendix A.

### Delimitations of the Research

The study was constructed with the focus of collaborative teaching as it applies to academically-able students. The collaborative teaching model described in the review of the literature is used in other inclusive settings - including full inclusion settings. For the purposes of this study, however, the focus of the research is on collaborative teaching in general education environments where academically-able students are being included with their non-disabled peers. Typically, these students are categorized as learning disabled. They are the majority disability in the school programs of this study. Most of the schools studied did have other special education students, namely emotionally disturbed and mentally retarded, in their collaborative classes. These students with disabilities were a distinct minority, however.

### Data Analysis

Each set of interview data was analyzed separately in three stages (Krueger, 1994; Stewart & Shamdasani, 1990; Miles and Huberman, 1984). Stage one consisted of data reduction. Activities included abstracting quotes from transcripts, categorizing data gained from interviews, and incorporating field notes onto the data. Stage two focused on data display through charts and matrices, listing low inference categories with quotes, field notes, and self-memos. Through this effort of organization, data trends and patterns emerged, which in turn led to higher order themes (those patterns that characterize the data across several categories in each of the matrices). Stage three led to drawing conclusions about the data and verifying those conclusions. Conclusions were drawn through the emergence of patterns and themes linked to collaborative teaching. These patterns and themes emerged through further clustering of data and differentiating issues.

The data were confirmed through multiple sources. Transcripts were audited, field notes were reviewed, and a research assistant checked the study themes and conclusions for accuracy. In addition, the study group and the research director gathered to review the findings after the final draft of the research report was written to insure further the veracity of the findings. Moreover, as planned, they generated general recommendations and training recommendations from the findings and discussion of the study.

## Results

The results section of this study is divided into four sections. Section one contains the results of the small group or one-on-one interviews with principals and building administrators. Section two is comprised of the results of the focus group interviews with the general and special education teachers who participated in their school's collaborative teaching program. Section three presents the results of the focus group interviews with the general and special education students who attended collaborative classes. Last, section four contains the results of focus group interviews of the parents of general and special education students who participated in the collaborative teaching classroom.

## Section One: Principals and Building Administrators

### Motivation for Program Implementation

The motivation for instituting collaborative teaching programs in the schools of the study stemmed from a number of sources. Administratively, it can best be described as a cascade effect. The schools that were studied began the collaborative teaching program as a result of interest and encouragement from their central administrations. It is not known specifically where in central administrations the idea came from, (probably within the special education area) however, this provided a beginning for schools at all levels to start a collaborative teaching program if they wanted. Usually interest at the school level emanated from the principal. All schools in the districts did not institute programs. It was the principal's philosophy of serving students with disabilities that often made a difference. Principals embraced new ideas of service delivery for students with disabilities and their innovative thoughts were developed in general and special education classrooms by teachers who typically volunteered for the program.

Collaborative teaching programs began for a variety of specific reasons - most as a result of new beginnings. A number of schools in the study began their collaborative teaching programs when they opened anew. This provided for a rare opportunity in planning curriculum, in setting up service delivery systems (particularly for students with disabilities), and hiring new teachers who showed interest or had skills in working in a collaborative teaching mode. As one principal put it "It was the chance of a lifetime". Another principal exclaimed, "It was the sign of the times, it was best practices".

All of the principals and administrators who were interviewed specifically stated a philosophy of serving students with disabilities that stemmed from the thought "there must be another way". All seemed to agree that previous models of instruction (even those emphasizing the concept of integration) did not fit all students, and there needed to be a variety of ways to teach students. Some principals voiced the opinion that schools needed to be "a more teacher-friendly place" and most important was that "children should learn in age-appropriate groups". Once principal recounted an earlier experience. "A gifted child came to me and laid out her heart because she did not want to go off somewhere that was different from the rest of her friends. And I thought Holy Smokes! If a gifted child feels that way, how does a special education student feel? So I made a commitment to collaborative teaching."

The implementation of the collaborative teaching model also grew because potentially it could have a positive impact on instruction. Expectations were a chief concern. One administrator explained, "Whether we admitted it or not, expectations in special education were lower than those in general classrooms." The collaborative teaching model was set in place "to improve student knowledge and help content teachers give deeper knowledge in content areas". Also, there were benefits because the special education students had good role models in learning and behavior. This would have an impact on self-concept and behavior management as well. One high school principal even pointed out that the collaborative program was a good alternative to in-school suspension.

## Advantages and Disadvantages of the Collaborative Model

Administrators identified a number of advantages to the collaborative teaching program. They were comprehensive in nature and far outweighed the disadvantages. First and most important, special education students were kept in general classrooms, and they were not "pulled out like they were getting punished". This enabled special education students to be with their age-appropriate peers, be exposed to general curriculum and thus "learn more things" that were not possible in self-contained and resource rooms. Also, there were "greater opportunities to develop social skills within their own peer group." They simply did "not miss anything by not having to leave their class, nor did they have to catch up". Moreover, the notion of being "slow" was mitigated. As one person said, "In a collaborative teaching class no one knows who is special ed. and who is not. They cannot tell because both teachers are working with all students." Another added, "Unless I knew the class roster, if I went in to a classroom I would not be able to identify special needs students from general students. I can honestly say that students are more behaviorally appropriate in a general setting, particularly those who are emotionally disturbed."

General education students benefitted as well. They learned in classrooms with two teachers and this provided the opportunity to learn through a variety of teaching methods and strategies. Different learning styles were being addressed. "Administrators reported that there was less paper and pencil and more learning by doing activities that benefitted all students." Moreover, collaborative grouping of special education and general education students provided additional learning opportunities. All in all, this model helped marginal students greatly.

Principals and administrators commented on the advantages of having a team in the class. "With two teachers one can be more directive, one an observer. There is a lot less down time for everybody." It also is a particular advantage at the secondary level. It affords the opportunity to teach science labs with an extra set of hands and eyes. Safety in the lab can better be assured. Moreover, the content teacher is able to teach science to ALL students.

Two teachers also mentioned improved the possibilities of effective communication with students. "It gives another person in the classroom to work with - another personality." It gives the student two chances," said one principal. Another administrator pointed out that communication in the classroom is "greatly increased and its effects are felt positively".

There were very few disadvantages pointed out by principals and administrators. One disadvantage was the special education teacher being "spread too thin". In essence, the collaborative teaching concept can be so demanding in terms of time that special education teachers cannot be everywhere at once to support all the collaborative efforts needed. This weighs on the delivery system and taxes the efforts of general educators as well. An additional stressor is the number of students who enter collaborative teaching throughout the school year as a result of mid-year placement or moving into the district. This increases the number of students to be served and necessitates even more planning time for teams.

Another identified disadvantage was the inclusion of students with severe disabilities to be served by the collaborative teams. Even though these students may be a small minority, they take an extraordinary amount of time that typically is taken from the overall collaborative effort. Despite being enthusiastic about the collaborative teaching model some principals and administrators expressed the opinion that the students with severe disabilities should be "pulled out" for special education services. Thus severity issues in behavior, reading level, and developmental skills seemed to be a criteria demarcating advantages and disadvantages.

**Resistance to the Model**

Resistance was an issue that had to be dealt with, particularly at the inception of the collaborative programs in the schools. Some respondents identified isolated incidents of resistance, but a number of trends did emerge. Most prominent was the resistance of general education teachers having a special education teacher "on their turf". There was definitely an issue of intimidation. At the same time, special education teachers were not used to teaching "so many students at one time". Both feelings usually waned as time went on and teaching and work styles were intermixed. This included "a meeting of the minds" on academic integrity issues such as learning accommodations and nonstandard evaluation techniques.

Resistance tended to be mitigated by phasing in collaborative classes with "volunteer" teachers. One principal commented, "That's the only way it can be done". Where teachers were assigned to be in the collaborative teaching model there was more resistance initially and more resistance to overcome. Another source of resistance came as result of special education teachers not being in general classrooms as much as they were needed. One principal stated, "It is impossible for them to be there all the time. There are IEP meetings and other pressing needs." But, all in all, there was an overriding sense of appreciation of the model because for years special education students were "mainstreamed" and general education teachers had no help or assistance. With the collaborative teaching model there may be more students with special needs, but there was ongoing help in their classrooms.

Some resistance from parents was reported by principals and administrators. Parents were worried about academic integrity issues in the class, and above all, that the curriculum was being "dumbed down" in order to reach all students. A few parents asked, "Does this mean my child is in a slow class now?" On a somewhat related note, there was resistance on a sustained basis when students with severe problems or those who were not "academically-able" bogged down the classroom process.

**Impact of the Model on the School**

Another area of inquiry was pursued to discover what kind of impact the collaborative teaching model had on the school since being implemented. The overall impact seemed to show that everyone in the school was more involved. Special education and general education teachers were involved more with each other as well as being more involved with each others' students. Everyone felt more included in school life. In addition, there was a greater appreciation for strengths and weaknesses of students in their learning, and teachers in their teaching. Thus "professional roles have grown greatly" as one respondent observed.

Other areas of impact focused on administrative matters. Scheduling students into classes became "much more difficult and intricate". Flexibility was a hallmark in matching teachers with the appropriate teachers, especially at the secondary level. In a number of schools the collaborative program schedule was devised first and then the rest of the school program was constructed. That necessitated more input from teachers in the scheduling process. Moreover, a key concern was overloading classes with a disproportionate number of special education students to general education students. "Now we have to be very attentive to numbers," said one administrator. This forced the issue of allocation of human resources including support staff. It also magnified the issue of what students could be included and those who could not benefit from the collaborative model. As one administrator put it,

> "If you put a severely disabled child in with general and LD students, it is too much. It overtaxes and at the same time is taking away from those who really need it and need a second person in there to modify instruction. So it really defeats the purpose, and it looks like a larger special education class."

The move to collaboration has won over many teachers who have experienced it in their schools. This prompted one administrator to observe, "Teachers now do not want to go back into non-collaborative settings, particularly general education teachers who have had students with disabilities in their classes without collaborative teaching. Now they have help."

In addition, the issue of collaborative teaching has become an issue in hiring teachers in the schools that were studied. It was common to hear administrators say they ask about knowledge and skills from prospective teachers in order to evaluate if they can work in a collaborative mode. An adjunct to that notion is seeking attitude and opinion that has a bearing on the success of a collaborative program.

## Factors Considered when Establishing a Collaborative Classroom

When asked what factors are considered when establishing collaborative teaching classes and teams, the responses were quite similar. It was "important to figure out what would work best for the faculty and the community." Almost all responses focused on a strategic mix of students and the right number of students with disabilities. Needs of students became a paramount concern along with severity of disability. Most schools had a goal that the percentage of special education students be no more than 30 percent. The range was usually 25 to 40 percent.

The other prominent factor was making sure that teachers were willing to be a member of a collaborative teaching team. This usually called for a volunteer process in retaining teachers in the model and adding new ones.

## The Role of the Building Administrator

Most administrators perceived themselves as being the "cheerleader," supporter, advocate, and promoter of the program. It "is protecting team players that can carry that out". This is "going beyond paying lip service" to the needs of all involved. It is being a problem-solver or "heading-up problem solving groups" and "helping teachers stay `with it' amidst criticism" from wherever it comes. Depending on the level, whether elementary, middle or secondary, there are different levels of involvement for principals. Most often there is an assistant principal or coordinator that oversees the daily workings of the collaborative program. Nevertheless, the program has little chance of being effective without the full support of the building principal.

Two other areas that are identified in the roles of administrators are putting together the master schedule and arranging for staff development. Giving top priority in scheduling is very important if the collaborative teaching program is to be successful. Many administrators schedule the program needs first with the input of their teachers and then schedule in other school priorities. It is this kind of commitment that makes the programs in this study successful.

Finally principals and administrators see themselves as being the facilitators of staff development for their collaborative teachers. Therefore, they arrange for them to attend university-sponsored workshops, to share best practices literature, disseminate information, and provide resources for mentorships.

## How Teaching Has Changed Since the Inception of the Program

Principals and administrators observed that teaching has changed dramatically in a number of ways. In collaborative classrooms more strategies are being used. There are more ways of delivering material than just straight lecturing. "The old answer the questions model has changed." There are hands-on activities and cooperative learning groups. Overall there are less paper and pencil tasks. "Now overhead writing has turned to printing. Spacing on tests is different and tests are more readable. Note taking and test administration is different."

Special education teachers have a great repertoire for getting around problems and still teaching the material. That enables teachers to take a creative route and do some useful things. For example one principal commented, "In government they do mock Senate and write bills. They could not do it with one teacher." "In science class it is the same situation. They monitor more easily and two sets of eyes in the classroom enable the teachers to do more in a lot of different ways." What happens is "the lines get blurry" when general education and special education students start working together effectively and efficiently. And the special education teachers become more comfortable with content. The same is true with general education teachers when it comes to modifying the process of delivering content. One administrator observed, "We have one teacher who has been teaching for 30 years and is now doing collaborative teaching. There is a visibly different way that he now teaches his class. He has tried new things and taken the initiative."

Other positive effects were pointed out as well. The positive relationship included sharing, caring, moral support and effective communication by the collaborative team members. "The collaborative program shows students an example of two teachers working together. It shows them cooperation and good working relationships." It shows how "to share instruction, share a classroom, share kids. They complement each other and that is very powerful."

### The Characteristics of Good Collaborative Teachers

The chief characteristic of a good collaborative teacher was identified as flexibility - the ability and willingness to change. This response echoed over and over from the administrators. Flexibility was important because it forged the basis of a professional relationship that involved trust and respect, communication and sharing. As one respondent put it, "There's more to it than just sharing a desk". Good collaborative teachers have "to plan, coordinate methodologies, organize curriculum, problem solve and be flexible in scheduling at a moment's notice."

There is an equality forged in a relationship of two professionals that were trained differently, that initially taught differently, and approached their students in a different manner. As one administrator stated, "The general educator has to know a little bit about special education and special education children. Special education teachers need to have good knowledge of children and teaching strategies in general."

There was also a curious statement that came through during interviews. It was "that an important characteristic in being a good collaborative teacher was a commitment to the model by saying `I'll never go back to doing that again". The spirit of that statement meant that teachers would not revert to previous styles but "always have willingness to say let's try something new." Another comment reiterated the same theme. "To have the willingness to step out and say this is good for the kids, and I'm going to give it a try." To say this didn't work, let's try something else and admit it didn't work."

### Staff Development and Collaborative Teaching

The degree of staff development varied from one school division to another and from one school to another. Some schools had an intensive set of workshops before the collaborative teaching model was implemented. This training was done by consultants or school-based staff. Staff development took on various forms. Some schools sent teams to university-based conferences on a yearly basis. Most schools participated in an information sharing process. Current literature was shared, new ideas and best practices were disseminated, problem solving sessions were arranged. Most important, all these activities were ongoing. According to principals and administrators, there was hardly a school that did not set aside time so that issues pertaining to collaborative teaching could be discussed with teams. Usually these sessions were lead by an administrator, who in many cases was a principal, an assistant principal or a special education coordinator. The sessions also served the purpose of problem solving, fine-tuning and adding support to participating collaborative teams.

New teachers who entered collaborative teaching situations for the first time had a variety of experiences in staff development. Some were able to take advantage of county-wide in-services, while others were brought into the staff development schemes in their respective schools. It was possible, however, that some new collaborative teachers simply learned to be a collaborative teacher through mentoring from their partner in an on-the-job training situation.

**Parent Perceptions of the Program**

Administrators are among the first to know if parents are not satisfied with their child's placement or program. The collaborative teaching program is no exception. Responses of parents from all of the schools in the study were generally very positive. The differing responses depended on the knowledge of the parents about the program, the academic level of the student, and the degree to which parents were involved in their children's program.

Overall, the program was accepted by parents because their children were in the general class and were "receiving appropriate instructional challenges". Parents saw the "social benefit of the program" and viewed it as an effective program. There was very little discontentment reported to administrators regarding the program. Most interactions with parents were precipitated by a lack of understanding of how the model worked. Upon explanation or classroom visitation, parents usually had few concerns. In schools where this model was presented to parents at a "beginning of the year orientation" there were fewer parental questions at the beginning and during the school year.

Some administrators commented that "the parents are starting to expect this in the schools". Thus parents of students who received collaborative teaching at the elementary level want it to continue at the middle school level and so on. In addition, some parents of general education students have requested that their child(ren) be placed in a collaborative classroom. They like the idea that two teachers teach in a classroom and that both of them can help all of the children. At the same time, some parents of general education students express the concern that "the curriculum is being watered down", and they must be assured that it is not. Moreover, most resistance that comes from general education parents stems from the effects of the program on their gifted children. Parents of gifted students have ongoing concerns that their children are not benefitting from the program and in some cases should not be members of a collaborative classroom.

## Section Two: Collaborative Teachers

### Impact on Teachers

The greatest impact the collaborative teaching model has on teachers is the professional relationship that is forged as a result of working together. One teacher likened it to "being in a marriage". Things work out well when there is mutual respect, cooperation, communication, and planning, both in and out of the classroom. Teachers complement each other in the classroom as far as mood, style, fatigue, and enthusiasm. But things become very stressful in the classroom when only one teacher is present ("a single parent") and support is lacking. Nevertheless someone is always there for better or worse. In most ideal situations, there are two teachers for students to relate to, however.

The key is that what happens in the classroom is viewed as a collaborative venture not only as collaborative teaching. Thus "there is professional critiquing of each other and being a sounding board for each other. There are things you cannot do when you are by yourself." Moreover, there is the comfort of knowing that "you are not in a class of 35 by yourself." This helps when it comes to seeking support, hashing out frustrations, and preventing teacher burnout.

The relationship carries over to all the dynamics in the classroom, most notably the impact on teaching and learning, as well as the ability to keep the classroom under control. Teachers feel that collaborative teaching has broad application to the processes of teaching because it meets a wide range of instructional needs. With collaborative teaching, there are always two points of view. Teachers can "piggyback on ideas and teaching" and "provide examples and stories" to illustrate the points of their colleague. "You can pay attention to different learning styles" and "students can choose who they want to help them according to their style." Thus, in theory, all of the students in the class can be helped.

It was felt that all of these classroom dynamics had new challenges and that "teachers had a lot they could learn from each other." One teacher observed, "I am learning and increasing my competence as a teacher and my repertoire as a teacher. I am better meeting the needs of my students." Another teacher exclaimed, "I have learned more from my collaborative teacher because someone else is in the room, as opposed to a principal who comes in the room once a year to evaluate me. It is just a way of constantly learning new things."

The teachers also seemed to feel there were greater opportunities to focus on higher level content in collaborative classrooms. This was particularly true of the high school teachers. Mathematics and science were the often cited examples. In addition, teachers felt that they had more freedom to be creative and experiment in collaborative classrooms. Students also were able to perform at higher levels because effective accommodations were implemented frequently to bypass problem areas. Several teachers recounted how collaborative teaching allowed for a number of their students to perform orally on class assignments and tests with their help and how that allowed many students to "put their best foot forward" in demonstrating what they know. Without another person in the class, and one that understood the practicalities of accommodation, this would not be possible. In the end, collaborative teaching prevents the teaching process from getting bogged down to the detriment of higher learning outcomes. The ultimate effect is that - "content comes first and remediation comes after it." This is not the rule in more restrictive special education settings.

Teachers felt another chief impact of collaborative teaching was their ability to maintain discipline. The simplest explanation was that two teachers brought "two sets of eyes and ears" to the classroom. But there were other reasons. Teachers felt they could do more creative things that kept their students motivated and on task. Moreover, peer models helped out with the instructional process. This was described by one of the teachers. "We have some definite discipline problems in my classroom, but it is much easier to instruct on what they are doing is wrong when you have other kids to look and say `this is what you are doing."

Teachers also saw behavior improve to the point that a reward system was not as necessary as in other classes. Less intervention systems needed to be devised because behavior was less of an issue. A middle school teacher shared her perspective on this point. "There's no more' there will be popcorn on Friday with movies.' Kids now know school is for learning."

There were reminders that there were not always two teachers in the collaborative classroom, however. This situation did pose great challenges at times. When one teacher is in a classroom there is only one set of eyes and ears doing his/her best with a class that has a plethora of instructional and behavioral issues. This is one of the most difficult times for the remaining teacher. As one teacher put it, "I'm like Jekyll and Hyde. I am like two different people - when there are two teachers in the room and when there isn't. That leaves a lot of room open for inconsistency. But I can't help it."

Overall, the teachers felt that collaborative teaching had a far-reaching impact on them. They felt they were able "to reach more kids" and that each day posed a new opportunity to learn something new from their collaborative teaching colleague. There was universal agreement that "each class should have two teachers because the students learn more and the teachers learn more." Special education teachers felt a particular impact. They felt much more integrated into the daily workings of the school and not segregated, to some degree, just as their special education students often feel. They got to know a cross section of all the students in the school. Acceptance is measured by a variety of barometers. The highest compliment to any team's impact is knowing that they as a team have been accepted and are successful in their efforts. One team shared the clear indication of success as other teams nodded in agreement, "You know you have arrived when each of us receives a Christmas present".

### Impact on Students

The collaborative teaching model has had a mostly positive impact on special education students. In an behavioral sense, discipline issues have decreased and behavior management has become easier. This feeling stems from several factors. Special education students have positive role models in their collaborative classes and the ecology of behavioral interactions is far more productive. This in turn allows for special education students to develop more workable and sophisticated social skills and use them with their general peers. A high school teacher underscored this point. "I have had students that were total discipline problems last year, but did their best to pass. In the collaborative class, however, the special education student is a very mature-type child."

In addition, everyone in the class gets more attention because of the presence of two teachers. This includes students who are in need of extra help but have not been identified as having a disability. There are more questions answered, more students are on task and are completing tasks. One teacher observed, "The kids are forced to be more responsive, there is less opportunity to misbehave. It's a chance for more help." This is true of the non-disabled students in the class. They get extra help and "instructional reinforcement" too. They benefit from the same collaborative approach as their disabled peers. "They respond to highlighters and process activities too," commented a special education teacher. The special education students in collaborative classes reaped a wide array of academic benefits for some of the same reasons as cited above. For instance, they benefitted from the presence of their non-disabled peers as role models in learning, performing and accomplishing academic tasks. More importantly, they were able to keep up because they were not allowed to fall behind. They were given more help ("instead of none") and support, were able to ask more questions, and enjoyed more individual attention and "more skills back-up". A teacher explained, "You work with them a few minutes in different ways, and then all of a sudden, a light bulb goes off." As a result the students "show improved performance", and they "find the extra help motivating."

General education students were reported to help with instruction in varying ways. Gifted students were assigned "buddies" as they were paired with students with disabilities in their class. They became mentors and role models to their disabled peers. In essence, there was an "extra boost" in the classroom as the "top kids" were "enlisted" to help out. The only time this strategy did not seem to work was when "the special education kids were too low in their abilities and skills". This also affected the motivation level of the bright students when the curriculum lacked depth and "got bogged down". They became frustrated and bored. This lead to two reasons not to be enthusiastic about the classroom process - unstimulating curriculum and the inability to be an effective classroom peer tutor.

The teachers saw the collaborative teaching program as having a positive impact on the self-esteem of the special education students in their classes. In sum, what happens in the class increased confidence and improves self concept. There is "more acceptance and less rejection" from their non-disabled peers and the negative effects of labeling fade over time. The special education students "no longer stand out", the "kids are not singled out"and "they don't feel singled out, segregated, or different. And they like it." In fact, it was pointed out that "the special education students love the collaborative teaching program."

They get "weaned away from the experience of being pulled out". In turn, they respond to the higher expectations and demands of the collaborative setting. They "become less dependent, and more independent in organization and in planning work." They develop better study skills in middle and high school. Ultimately, they "start to think of themselves as other kids".

The teachers felt that mixing special education and general education students in a collaborative class had benefits for the general education students. "They cheer for the special education students" and "unlike mainstreaming, the special education students become unnoticed". Unknowingly the general education students become more motivated in their work. They see how hard the special education students work and that spurs them on to work harder as well. They also seem to realize their good fortune and "begin to understand all the positive things they have going for them."

All in all, the teachers felt that collaborative teaching prevented more students from "falling in between the cracks" of their school program. In the past they have experienced classroom situations where students were not able to have something explained a second time, where there was virtually no support and "double checks," and where students would not ask questions for a variety of hurtful reasons and become more withdrawn. Most important the teachers felt that they were participating in a innovative educational movement that genuinely benefitted students - collaborative teaching where students could look forward to a time of the day "when no one could tell who was a special education student and who was not."

## What Makes a Collaborative Team Work

While each collaborative team is distinct in its own relationship, there were some universal notions as to why a team is successful. It was unanimously agreed that administrative support was a necessary ingredient. Without full support of the program in such areas as scheduling, troubleshooting with parents, professional development, and encouragement, then the entire concept could be at-risk. Beyond administrative support, whether from the principal or his/her lieutenants (or both), working as a team was paramount.

There were definite ways in which a team could be successful. First and foremost was working together as a team which mandated giving up control and forging a cooperative style. There were constant reminders that there was only one desk in the classroom and only one classroom itself. It was stepping on to another's "disciplinary turf" and challenging their professional mindset. There were several useful metaphors that captured the essence of the relationship.

> "It's like someone walking up and saying, okay, I'm driving your car today. It takes a lot of communication and openness to get through that . . . and willingness to sit down and say this isn't working, what can we do about it?"

Staying with the metaphor of driving a car, a secondary education teacher explained:

> "For me it's like getting in someone else's car everyday, five

> different cars, and never being able to drive my own car. It's like learning how different cars operate. You can go fast in one and not the other. Some things you can touch and others you can't. It takes giving up power on each side.

Working together meant a number of things. It meant sharing goals and "not countering each other", sharing control which necessitated "meshing styles" for a "good personality blend". In addition, it required being sensitive to each other's feelings and "finding a comfort zone". "Seeing eye to eye and understanding why not." It also meant being sensitive to students with disabilities and "being interested in students with learning disabilities."

The students were best served when "the expert took the lead". But the team partner was not far behind. It was thought that putting the students first and meeting their needs helped the team stay focused. This notion tended to define the purpose of the team, guide its interactions, and help in working through any and all kinds of problems.

There were also elements in a collaborative team that foreshadowed a failed relationship and an unsuccessful program. Teams or team members that perceived working in a collaborative situation as "hardship duty" seemed to resent their role(s). When teachers were forced to be on a collaborative team the possibility of "making it work" seemed to diminish. In the view of the teachers, participation on a team "had to be optional". For teachers who were made "to do it" there were oppositional attitudes such as "Everyone has to do it. We rotate every two years. And we dread when it is our turn" or "I did it this year do I really have to do it next year?" And "I didn't go to college to be a special education teacher". Even worse were administrative threats like, "Make it work or else lose a special education teacher."

Planning was key to a successful team and effective effort. Ideally, planning time is available as schedules are planned and teams constituted. Ideally there should be a lot of pre-planning by collaborative teams before the school year starts. But this is not always the case. When planning is not done well, or thoroughly, or even at all, collaborative teams and their students suffer. One teacher commented, "It ends up with two bodies in a room that don't even know what the other is doing and not knowing how to help each other." Another shared, "Even though she is across the hall from me, it is like she walks into the class and we say `okay, what are we going to do today'?"

Equally as important, roles need to be negotiated and responsibilities require understanding in collaborative relationships. If collaborative teaching is to work in the truest sense of the word, a special education teacher cannot be looked upon as "an aide" or should not be viewed as "just another body" in the classroom. Then there is a bad match of team members and invariably a myriad of problems ensue. Worse, "students sense that things are not working out". In essence, there is a very messy situation that runs counter to all the precepts of what collaborative teaching is and how it can be effective for all students.- At this point it was felt that teachers should be able "to opt out" of their situation and not be forced to continue on.

Last, training was thought to be essential for teams to be successful and for the overall program to meet the needs of all its students. The quality of the effort often was proportionate to the degree of training, and training took on all forms. Some teachers received training in collaborative teaching before they were employed. Others attended university classes that focused on the collaborative model. Still the majority of teachers had no formal training in collaborative teaching at all.

Training in preparation for collaborative teaching was deemed most important at the beginning of the school year. However, this did not always occur, even for beginning teachers and teachers who were going "to collaborate" for the first time. It was agreed that the worst kind of training. But on-the-job training became important as the school year progressed through "pat on the back sessions", grievance sessions, sharing expertise and giving advice in work groups, and "just meeting for debriefing". This training was most effective when it was complemented by other kinds of training such as attending professional conferences and visiting other schools' collaborative programs. It was agreed that the worse case scenario in training was "going over it once, believing that the concept sounds great, and jumping into it." Teachers shared that "a lot of teachers have been blind sided by this approach and then become hungry for information". As a result some teachers have "jumped right in only to go back because of a lack of information."

### Classroom Composition

If collaborative teaching is going to be effective, an important consideration is the mix of students in the classroom. Classroom composition entails such factors as numbers of students per class, ratio of special education students to general education students, ability levels within the class, and the degree of severity of disability and its fit with the collaborative concept. It must be acknowledged that there are complexities in this area that belie absolutes. Yet, there are a number of fundamental thoughts that have a bearing on every collaborative classroom - whether elementary, middle or secondary level. No two collaborative arrangements are the same nor are the collaborative systems in any two schools. Thus, the words of one teacher provide good advice. "You have to look at the whole population of each grade level and then make decisions who will benefit from collaboration and see how many classes you need." Ratios are key to the success of any collaborative classroom. The schools in the study approached this issue in different ways. One school division superintendent set a limit of one third special education students. But most of the arrangements were meted out at the building level. And they covered the gamut. There were reports of 8 of 25, 4 of 16, 6 of 25, 11 of 35. There were also classes that pushed the limit or crossed the limit of reason. Examples and accompanying comments were: 21 of 29 ("you need a collaborative teacher every day"), 11 of 16 ("this is not collaborative teaching"), 10 self-contained students and 25 general students ("this is too many!"), 4-5 students who were "severe" ("that's too much"), and 50 percent general students 50 percent special education students (that's not fair!"). Yet, one teacher reported that she had 24 students and 19 were learning disabled. She observed, "It was still a good class".

It was agreed that numbers were a key issue. "If kept down, then the program could probably be 90 percent effective" agreed one group. The overwhelming sentiment was that the numbers must be kept as low as possible. It was agreed, however, that numbers did not tell the entire story. "You must look at the needs, there's no magic number." There are students in collaborative classes that need extraordinary support. There were observations such as: "You can load up a class with too many needs - hearing impaired, low reading", "You have to watch out for slow learners and discipline problems, that throws the ratios off", "One student who is emotionally disturbed can throw the entire system off", and "it's just not a place for lower quartile kids". One teacher put the issue in perspective, "If you consider the number of special education students, general education kids with behavioral issues, low level students, those not deemed special education - then you have a problem." Whereas collaborative teaching was perceived as a viable teaching model for students with disabilities, it was not seen as working for all students. There are some students who need more individual attention, more structure, and more support. Students who had behavior disorders and emotional disturbance posed the most problems to collaborative classes. One teacher commented, "One E.D. child can throw the whole system off." And the predominant view of the teachers was "Anytime there is 100 percent inclusion there will be losers, and we are seeing that."

There were also strategic considerations for the composition of collaborative classrooms. When collaborative classes are constituted there need to be enough students who can be role models for their disabled peers. They are able to set a tone for appropriate behavior, for good work habits, and for academic achievement. Moreover, there are lots of rich opportunities for incidental learning in all areas of student life. In some classes it is common for students who are good role models to participate in peer tutoring, to lead cooperative learning groups, and to ensure high levels of academic work. One teacher expressed the value of good role models, "We need diversity in the classroom. I need to be able to ask higher level questions and tap higher cognitive skills".

In at least one of the schools of the study, this was not possible. Accelerated students were not included in collaborative classes as a matter of policy. This provided a de facto two tier system of education while addressing the issue of slower pace and lower level curriculum that may occur in collaborative classes. This arrangement received mixed reviews. What did not seem to be fair was the effect of the policy. Accelerated classes usually averaged 26 students while collaborative classes averaged 35 students. Another issue emerged from the teachers that pointed out the detrimental effect of the wanton growth of collaborative classes during the school year. Teachers related recurring instances where students were added as the year went on, thus increasing enrollment of classes to potentially unmanageable size. Students were added as a matter of routine when they moved into school neighborhoods and when they were identified as being a special education student and placed in a collaborative setting. Teachers expressed their concerns. "It is not a cheaper model." "Collaborative classrooms can't be a dumping ground because we have two teachers." "They shouldn't assume that we can solve all the problems of the world." Last, a general educator provided an admonition, "Please remember, when a special education teacher leaves the room or is not there, the general education teacher is alone."

### Delivery of Services

The implementation of the collaborative teaching program has profound implications for the quantity and quality of special education services delivered in schools that utilize that model. What was described repeatedly was a delivery system that was "overtaxed" in proportion to its resources. The refrain from collaborative teachers was that "they were spread too thin", and they could not keep up with their duties to their level of satisfaction. In their eyes the needs were too great and the numbers too large.

There were comments that there are too few collaborative teachers per program. Most teachers thought there should be one collaborative teacher per grade level to do an adequate job. As one teacher put it, "There aren't enough bodies where bodies should be." Another teacher observed that "there was so much need it was very difficult to keep up". Moreover, a successful program's only "reward" was the addition of more students as administrators would say often "I have another student for you". This prompted a set of beliefs and behaviors that were not productive. It was typical for respondents to say that teachers who work in collaborative settings "are doing it out of there hides". One teacher keenly observed (as others nodded) that "she was spread so thin that at times it was hard to call herself a collaborative teacher". Another lamented, "The reality is that teachers are trying, staying after school and taking things home and dealing with each other and planning things out. What I fear most is that they are going to say - 'well, you're doing it, and you don't need any money'."

As is inferred in the quotation above, availability and frequency of service is an important item to measure the success of the model as it is implemented. Teachers agreed that the amount of time that a team was able to collaborate had a direct bearing on the success of the program. There were numerous programs in which availability and frequency of service were satisfactory. However, the prevailing thought was there had to be enough direct service time for the program to be beneficial. One collaborative teacher exclaimed, "You can't do collab on the run." When the program was "really overtaxed" responses like the following were uttered:

> "I'm not in there every day, and it takes a long time to know the teacher and the students."
>
> "You need to be there everyday to make it work. It really makes a difference."
>
> "I'm in there two days a week to start with and sometimes need to do something for a day. Then I am in there one day a week."
>
> "I don't think that you have collab when you have somebody two days a week. It's not the fault of anyone here. I don't think it is collaborative teaching."

> "I think we might be misrepresenting that we have a true collaborative class and program because collaborative time is being cut down. I wonder about the legality of saying that to parents."
>
> "It doesn't have to be 100 percent day, but it should be reasonable."

These points can be elaborated upon by the comments of a collaborative teacher. "We have two collaborative teachers who are collaborating on two different schedules and with two different planning times and their availability is limited. I think this system is no longer effective for special education students."

Another issue that falls under the concept of delivery of services is the issue of a continuum of services. As discussed in the section entitled "Classroom Composition", the collaborative model was not thought to be a viable option for all students with disabilities. The overwhelming view was that collaborative teaching was not a model that fit "severe" students who needed more structure and attention because of their behavioral or instructional needs. Teachers thought that the vast majority of students with disabilities who were academically-able could benefit from the collaborative model. But a continuum of services was needed for "severe behavior problems, for more one-on-one, and for remedial instruction." If there are not resource options or self-contained environments then these "lack of resources can undermine the efforts of the collaborative teaching model". Teachers simply believed that there were some, and in some cases few students, who needed more restrictive environments. There was a sense that collaborative teaching was one step less restrictive than pure mainstreaming, but part of a series of options that could be beneficial in the education of students with disabilities. One comment from a teacher on this topic sums it up, "Collaborative teaching needs to be in place. We are supporters of collaboration, but we know that it is not for everyone." Another said, "I support the notion of collaboration fully, but some kids are better off in self-contained classes."

**Parental Reactions**

Teachers report a variety of reactions from parents to the collaborative teaching program. There are distinct differences between special and general education parents; moreover, general education parents have varying reactions depending whether their children are gifted, average in academic performance, or low achieving students. Of course, a key variable is the degree to which parents know what is happening at school. Other variables such as socioeconomic status (i.e. upper middle class through working class) and current grade placement level (i.e. elementary, middle or secondary) of students are important as well.

Most parents of general education students do not know that their children are in collaborative classes. Little direct communication links parents and teachers with this issue. Typically, they have heard of the concept of mainstreaming but not collaborative teaching. Thus, most of the time, they are confused or know very little as to why two teachers are in one classroom if they know that at all. However, as time has gone on, more and more parents are learning about collaborative teaching.

Initially, there are concerns voiced to teachers. "I don't want my child in with learning disabled kids!" "My child is so bright, should he be in that kind of class?" "Is it the same curriculum?" "Why two teachers, can't one teacher do it? Is it a tough class?" However, when parents observe collaborative classes they come away "feeling it is okay". Teachers agreed that when the benefits are seen first-hand, parents are quite accepting. When progress is realized they are won over. When they realize it is the same curriculum, they are convinced. Some parents even extend their thinking far from the classroom in believing that their child's experience is "good for preparation outside of school".

The most common complaints of parents of gifted students is that their children are not challenged, the pace is too slow, and the curriculum "too watered down" for their children. The overall impression is that the "inclusion class is lower". The most frequent fear of parents of low achieving students is that their children will not be placed in a collaborative class the next year, whether in the school they are in or the school they will be attending next. But, all in all, there is a fundamental difference between general education class and a collaborative class. When asked which one is more effective for students generally the answer is given easily. But when the discussion is focused on the average general education student the case is not as clear. This prompted teachers to have a common feeling summed up in the following response. "When I'm asked, it puts me in a compromising situation. I can't say the opportunities are not the same in other classes. I cannot say "yank your kid from my class and put them somewhere else."

Parents of special education students know that their child is in a collaborative class "from the beginning". This is due to parental notification that is mandated by the Individualized Education Plan (IEP). Most often parents are "grateful" for the placement because it seems they are "placed" and "not dumped into classrooms as can be the case of mainstreaming". One teacher shared a common view. "They don't see a sink or swim attitude like mainstreaming. They know there will be help." These parents "have doubts when their kids start the program", but they are alleviated over time. As one teacher put it, "At the end they are great supporters."

One interesting development that has occurred from the implementation of this model is how it has grown through demand, both inside and outside the school. Not every school in the school divisions studied has chosen to use the collaborative model to educate students with disabilities. Therefore, it is somewhat common for teachers to work with students who come from "out of the school zone". This trend seems to be reinforcing and validating of the program itself. And for that the teachers seem very proud.

### Time

The data were replete with allusions to time. Simply put, there are key temporal aspects to the collaborative teaching model. There were suggestions throughout the data that "it takes time" for the system and structure of the collaborative teaching model to get off the ground. Moreover, the system "gets better as time goes on" both throughout any given year and over successive years. There were numerous comments that hinted that "each year was more relaxed as well". The longer that teachers worked together the easier it was to collaborate and plan.

There were additional temporal considerations. Parents of special education students tended to like the collaborative teaching model faster than the parents of general education parents. There was more of a sequence of acceptance for most general education parents starting with awareness of the program to questioning, doubting, and ultimately acceptance. Time of acceptance varied and there were many examples of parents of general education students being "big supporters in the end".

In addition, there seemed to be indications that parents believed that their child's participation in collaborative teaching could be short-lived. Parents of special education students constantly wondered if the collaborative teaching program would exist over time in the middle and high schools their children would attend. Parents of general education students wondered if their children would participate in collaborative programs from one year to the next (for positive and negative reasons). For them, next year always seemed to be a big question mark.

Also, there seemed to take time for successes to emerge from the model. One set of teachers recounted how hard they worked in order for one of their students to pass the Literacy Passport. They shared that when one of their students passed "they literally cried". Another example came from a former middle school student who returned to her eighth grade teachers to say, "I'm really doing great now. I think that all that learning paid off."

Throughout the interviews one large idea persistently emerged. It was that collaborative teaching was a living idea. You must do it to know it. And you must keep at it to grow it. The tone inferred that there were not any shortcuts in the system and that the complexity of the idea mandated patience and perseverance and a steady belief in the concept.

## Section Three: Students

### General Education Students

The overall reaction to the collaborative teaching model by the general education students was that they liked it. There were a number of reasons stated at the outset of the interview such as "when one teacher is busy the other can help", "it is better when teachers are different like in the area of personality", "it helps a lot", and "just getting more than one opinion really helps in our class", and "it makes a big difference from the one teacher classes". To a minor degree there was some dissent in responses like, "One teacher is enough!"

The advantages of the model far outweighed the disadvantages from the general student perspective. Instructionally, it was acknowledged universally that they received more help in the classroom. There was more opportunity to ask questions and get them answered, even when the other teacher is talking. Teachers would point out "different ways to learn and do things" and that "teachers teach subjects with a lot more depth and with more explanation". Moreover, "teachers attempt to teach things they wouldn't attempt to do alone in the class." "They have different strengths and use them in the class." In essence, they believed that "they learned better" as a result of having two teachers in their class.

In a behavioral sense, students observed "that it helped students pay attention more" and "that it was easier taking care of distracting students". Interestingly, most disadvantages identified by the general education students pertained to behavior management. It was not uncommon to hear "you get in trouble more", "you are able to talk less" and "if one's not watching the other one is". To sum it up one student exclaimed, "They always see you when you do something wrong." Yet, when directly asked if they thought behavior was better in their collaborative classroom the vast majority of responses indicated "no".

One other disadvantage was noted that had a direct bearing on the collaborative teachers' relationship. It was the lack of consistency in approach. "One teacher says you can go out, the other one says you can't". Differing styles are perceived as being a disadvantage as well. "The teachers are not always organized in teaching together." However, when one teacher is having a "bad day" the other is a good counterbalance. "If one is in a bad mood, the other one will be all right."

Specific areas were addressed. Grades were reported to be better across educational levels. Students attributed this to receiving more help, getting more questions answered, and understanding the material better. One student said, "I went from F to A, and from D to B when collaborative started." Another student astutely observed, "My grades haven't really gone up, but I understand a whole lot more."

Students also reported that they were more sure of themselves in classes. This feeling stemmed from knowing the material better and the opportunity to ask more questions and develop a deeper understanding of the work. Ultimately, their greater feeling of self-confidence stemmed from getting better grades. One student pointed out that "he could now learn things in different ways and that got him better grades."

In the areas of organization and memory there were varied answers from the general education students. Some students reported that there was little difference in the two areas. What did emerge was a pattern of responses that showed homework was checked more and teachers provided more supervision of work to keep their students up-to-date.

Students agreed that it was easier to do work on their own, albeit, some students did not point out that it was easier to a significant degree. Students said they found it easier because they got more questions answered and with more depth of explanation. The "two teachers make a difference." The only negative pointed out was when teachers gave two different explanations. Then things became more confusing to the students.

General education students generally expressed that they enjoyed collaborative classrooms. Some did not see any difference from other classrooms. Others were indifferent, but no one expressed a dislike for collaborative teaching. Some very positive statements were expressed by students of all levels. Some students said, "They make it fun. We always don't know what we're going to do, but it is fun." "The activities and games make the class more enjoyable". "They are always doing something different; they make it more interesting."

Along with liking their collaborative classes students, mostly said they would like to continue in collaborative classes the next year. They reiterated that they could count on receiving more help in collaborative classes, and they felt it was a place that everybody could learn. One student observed, "Nobody feels bad here. Everybody keeps going up in levels. There are all kinds of kids low and high, but everybody is going up." Another student said an emphatic YES when it came to liking collaborative teaching in his difficult classes.

Some students did not express a preference either way. A few students responded that it depended on the class. The only negative comments centered around behavior issues. A few students seemed unhappy that they were put in collaborative classes because there was greater odds in getting caught when misbehaving.

### Special Education Students

All but a very few of the special education students expressed that they liked the collaborative classes they attended. Many advantages of the collaborative model were identified. The themes of getting more help and being given more time to understand the material were prominent in the responses. Students gave the following responses. "You can get more help." "Someone is always there to help." "You can get more questions and get more attention." "One teacher explains it one way, the other teacher the other way, so you understand it more." "The LD teacher understands that it takes us longer, and helps us stay up with everyone else." "With one teacher they don't take enough time to explain things, but with two teachers you get to learn the same stuff but in a way that you understand it." The main complaint regarding the collaborative teaching model was that they got in trouble more. As one student put it, "You can't throw paper airplanes." But in another area a disadvantage expressed by the students seemed to be more serious. There were complaints across the grade levels that there is more confusion having two teachers. "It gets confusing when they both talk. They confuse you. One tells you one way, the other tells you another. You get struck in the middle." "It can be confusing - each saying something different."

Grades were reported to be better. Students received more help in studying for tests, and there were more opportunities to understand the material. All students agreed that they received more attention. As one student put it, "There is always someone there." Most students did not see a discernible difference in classroom behavior, but a few students voiced the opinion that behavior was worse as a result of more students with emotional disturbance in their class. Students agreed that they were more sure of themselves in the collaborative class. Many did not elaborate, but a few hinted that they could depend on the teachers to get help with their work.

The special education students seemed to be more organized as well. Many students said that they had an easier time organizing their notebooks, and they were checked more often. They also seemed to feel more organized in doing their homework and were more mindful of deadlines. Also, students responded that they had an easier time remembering. This was attributed to the "tricks" and "songs" and "fun ways" to remember all sorts of things. It was also reported that it was easier to work on their own as a result of being in the collaborative class. This was mainly due to great explanation and clarification given by the teachers.

When asked if they were learning different ways to do things in the collaborative class, the response was mostly yes. "They explain things in different ways." "They try to adjust their teaching to what we need and give us different ways of doing the same thing." But some confusion was expressed in this area. "Sometimes we get two different styles and two different explanations." "It can be good and bad. Sometimes it can help, other times it can confuse."

The students expressed that they did like going to their collaborative classes. Students said they learned through "more games" and "they were not sitting in their seats the whole time." One high school student said he "enjoyed more freedom, more activities and more independent learning."

When queried whether they would like to be in collaborative classes the next year the responses were very positive. Some responses were given with a lot of elaboration, particularly by middle and high school students.

> "It is much better. We get more attention, and they help us do our work."
>
> "It is less stressful, and they watch out for us more. Sometimes they give extensions or help us with whatever else we need."
>
> "I'd like to be in more classes like this. We need it in math and science and others. There's a big difference in the ways they teach. The general teacher tells you the hard way to do it, and then the other teacher tells you the easy way. In a one teacher class you feel overwhelmed by all the kids."
>
> "You get to do a lot more activities. It isn't the same old stuff. It's almost fun."
>
> "YES! Will we have two teachers again next year?"

## Section Four: Parents

### Parents of General Education Students

Parents of general education students had a wide range of understanding of the collaborative teaching program. Some parents had a good understanding of the program, others simply knew about its existence, while some parents were not aware of the program or their child's participation in it. The degree of awareness depended on a number of factors, including if the program was explained to parents, how well the program was understood, and how active parents were in monitoring their child's program. This was generally true of all the general parent groups interviewed.

It was not uncommon to hear parents say, "I knew nothing about it" until they were asked to be part of the focus group interview. This prompted them to ask their children what it was all about, and how it was working. One parent said, "I know my son is put in a room with two teachers. That's all I know". Another said, "I know there are some kids with disabilities in my son's class." In somewhat of an exasperated tone a mother exclaimed, "I haven't heard anything about it. Does that mean that I am not paying attention or not really involved?" Moreover, when parents asked their children what the collaborative program was, many of them did not know, could not explain it or only saw it as a program where two teachers were in the room.

There were complaints that the program was unclear and not very well communicated to the parents. If the program was spoken about in a group setting, then it was usually at the beginning of the school year at "Meet the Teachers Night". But even there parents felt they did not appreciate the intent and goals of the program. One parent commented, "Even information and explanation was not enough." Another commented, "I heard about it at `Back to School Night', but I still felt there was a lack of information. For instance, why was she (her daughter) put in the class?" A number of parents wondered out loud, "Why did they select my child for the program?" "There are a lot of in's and out's that are not being explained." "I don't think that it is fair, for the past three years my daughter has been in co-taught classes. Why? It's not fair all the way through." Last, one parent said, "I like it, but I resent the fact that I didn't know about this from the start."

Some parents related that there was not much information at the beginning, but the program became clearer as the year wore on. This occurred with more interaction with the teachers. It was common to hear that both teachers were present during parent-teacher conferences. But the parents who had the best understanding were those whose children benefitted directly from the program. "My daughter is running A's and B's this year because the support is there." "A little extra review has really benefitted my daughter".

From a social standpoint the parents were supportive of the collaborative teaching program. There were comments such as, "It's no big deal, it's the wave of the future", "School should be like society. You can't shelter kids. They have to learn to be better citizens", "I feel like it ought to be part of an everyday learning experience" and "maybe there's a point not to know so they (students) don't feel like they are being singled out."

Some parents had a very good understanding of the collaborative teaching program. They understood the instructional and social goals of the program as well as the daily workings of the model itself. There were explanations like the following:

> "Two teachers teaching together at all levels."

BEST COPY AVAILABLE

> "Two levels taught at the same time with teachers simultaneously."
>
> "The plus to it is that they have extra time, have extra guidance, learn how to pick out things, whereas the class with only advanced children would not have it. They would be expected to get it on their own."
>
> "Special education and general education have roles and share responsibility, and if it is done right then an outside observer is not going to be able to tell who special education students are in the general population."

Other comments showed that parents could see longer-term benefits. There were statements such as, "If my daughter wasn't in this class then she wouldn't be surviving in the general class at all." "It helps with the adjustment to middle school which is a traumatic event". Last, "I think it will help my daughter get into college, and I'm for it."

The impact on the general education students varied as well, good and bad, but several prominent themes emerged. The perception of general education students changed towards their peers with disabilities. Parents reported there was greater understanding and acceptance. One notable quotation sums it up, "I thought so and so was dumb, but he's not. He's very smart, but he just has a learning problem. So he can't learn like another person." This prompted another parent to say, "The thing I like about it is that these children are not made something different or something ugly . . . they are people with disabilities."

There were also remarks that showed that general education students did better as a result of the collaborative teaching program. "My son is doing much better this year than last. He's like a whole different kid. He's got better grades and a better attitude toward self. "My child is not eligible for special education and likes it a lot. It helps self-esteem." "My child gets a lot more attention than before."

BEST COPY AVAILABLE

Others showed a negative impact. "He's had lower grades in social studies." This is the first year he hasn't been motivated." "The kids are not being challenged enough. I'm concerned about the slower pace and lower standards." Other responses indicated an issue with lower standards, but there was also an impact on parents view of discipline. "There are too many kids in the classroom and not enough collaborative teaching time. It's not fair to put a good student in a collaborative class to fix behavior. Fix the problem first . . . . It hurts those who are good students." "Thirty students are too much for this kind of program. The numbers alone cause problems." "I hope this is not the case of smart kids trying to help a dumb child." "Teachers get frustrated when the program is not implemented correctly, and the students feel it." "Because the special education teacher is not there a lot, when she is there she gives the special education students too much time."

Then a sobering thought is proffered by a general education parent who has had a special education experience as well. "My oldest son is 21. I wish they had this when he was coming along. It would have benefitted him greatly."

**Parents of Special Education Students**

Parents of special education students had more understanding of the collaborative teaching program than the general education parents. This was to be expected for a variety of reasons. The chief reason was the contact and participation parents had with the school, particularly with all processes and procedures related to individualized education programs (IEP). If parents did not fully understand the collaborative teaching program at first they learned more about it as their children participated in it.

The prevailing view of the parents was the collaborative teaching program had two teachers in the class, one general education and the other special education, and they worked together in the general classroom with all of the students. They were quite savvy in their knowledge of what the special education teacher did in the general classroom teacher. And as they put it, "The special classroom teacher knows where the general classroom teacher is coming from." Some parents viewed the collaborative relationship in a different way. "She helps the general education teacher with back-up. Not all of the burden is on one teacher to deal with so many different kids with special needs."

Whereas the parents understood the collaborative teaching program the greatest source of concern and confusion was what would occur at the next level of education? Parents did not take it for granted that the collaborative program would even exist at the middle school or high school level. This caused concern because of the favorable reviews given for their children's current placement. It was not uncommon to hear the question, "Does it happen at the next level up?" Even when parents had other children attending school at the next level, they were unsure if there was a collaborative teaching program in their school.

All of the parents believed the collaborative teaching program had a positive impact on their children. They commented, "He's much happier now." "She's more confident." And they saw demonstrative progress as well. I've noticed that his organization skills have improved a lot". "I see the amount of skills he has achieved in one year. It is more than he has gained in all the years he has been in school. He probably couldn't receive this kind of education in a private school." And "I'm crazy about the crew here. They have been following him since he was in ninth grade, and now they're preparing him for transition from twelfth grade."

There seemed to be a qualitatively different set of interactions in the collaborative classes. There is no doubt that staying in the general class to receive special education services had a profound impact on self concept. Responses from the parents like, "I see my son as having better self esteem - the teachers are so positive, and he can really get involved with the class" were quite common. Moreover, there was a sense that the collaborative team facilitated more participation from the special education students. "My child can get his answers answered now. He doesn't have to ask questions in front of the class and risk ridicule." "The other kids used to get so frustrated because my daughter would ask so many questions. They would make fun of her when she raised her hand. That doesn't happen now." "He's happier here, but he couldn't do it in a class of 30 without the collaborative team. Otherwise, he would just sit there, daydream, and not pay attention." "He gets more instruction, and he gets the specifics in what he is taught." "Before he would get embarrassed about going to special ed. class to get extra help. Now he doesn't feel different from the rest of the kids. It is more motivating, and he loves it." The most telling response from a special education parent was simply, "Finally, my child is involved with the class."

The only negative theme that emerged from parents was their children being put into a collaborative class when they could not handle it. In essence, they believed that some students just do not fit the collaborative model because their needs are too great - that there should be other options such as resource rooms for lower teacher pupil ratios or self-contained special classes for those few who need a highly structured educational program. One parent commented, "It hurts the kids who need to be self-contained. It's not fair to the other students as well." And, "I think the kids who need self-containment are getting lost in the shuffle, and they are being forgotten and their problems are getting transferred to the general classroom. So I think the collaborative program is wonderful for those kids who do not need self-containment. And I just think that if we had collaborative (classrooms) in addition to self-contained, that's your magic formula right there. That's wonderful . . . . But why sacrifice the collaborative program because there is no self-contained program?" Comments like these were a distinct minority, but they did strike a chord. When they were uttered there were a number of nods in the group showing agreement.

## Discussion

The area of collaborative teaching is currently in need of substantive research to gauge its efficacy as a bona fide option for students with disabilities. It is understandable why, at this time, there is little empirical evidence to support the case for the collaborative teaching model. The concept is easier to implement than to study. It is easier to write about than to research. Because of the nature of collaborative teaching, it takes on different forms. No two schools that utilize the collaborative teaching model are the same. No two collaborative teams have the same working relationship.

This study sought to research collaborative teaching in elementary, middle, and high schools in a variety of school divisions. Surprisingly, the findings per educational level were very similar to each other. There seemed to be more of a generic set of issues that transcended grade level and school division. These issues were articulated by different constituent groups during the process of data collection. The themes that emerged tended to validate each others' perceptions of collaborative teaching.

Collaborative teaching is a model that developed from a niche in the delivery of services continuum in serving students with disabilities. The continuum was constructed as a cascade of services that becomes less restrictive as students get closer to the general classroom. When originally conceptualized, however, there was a gap in thinking and in services. For many students the least restrictive environment became the general classroom and mainstreaming was the service delivery option of choice. All mainstreamed students were educated with their non-disabled peers in a classroom with general education teachers only.

Only when they were "pulled out" of their mainstreamed class and went to a special education resource room did they have the benefit of direct special education services.

The logical response to that gap in services became the collaborative teaching model where special education students, primarily those who were academically-able, stayed in the general classroom and received support from a special education teacher who collaborated with the general classroom teacher. But the collaborative model is not just another model that "reinvents the wheel". It is reflective of a conceptual shift that has students with disabilities learning with their non-disabled peers in the general classroom and general and special education teachers working together as never before.

In this study a number of issues have been brought to the forefront. The positive aspects of collaborative teaching need to be celebrated and replicated and the negative aspects identified and remediated. Without a sober view of collaborative teaching at this time the many strengths found in the collaborative teaching model are at-risk of being undermined by its weaknesses. Who better to point out the strengths and weaknesses but the individuals who "produce and consume the product" - teachers and administrators, students and their parents.

From this study we know that students with disabilities are able to benefit from this model of service delivery. They have shown demonstrable progress academically and behaviorally. Concurrently, their self-concepts have improved and their self-esteem has risen. Administrators, teachers, and parents concur with this observation. Moreover, students with disabilities are attending to their lessons more effectively and overall functioning better in the classroom. This is not surprising given the extra attention and flexible approach that a collaborative team typically can give a class.

There are preventive benefits to collaborative teaching as well. Students who are not identified as disabled are able to receive the same help and consideration as their disabled peers. This enables all students in the collaborative classroom to have their individual needs met. No longer does the notion prevail that "one size fits all" in instruction. In a real sense, there is an acknowledgment that students have different learning styles, behavior patterns, and developmental needs.

This model has served teachers well too. General and special education teachers who collaborate with one another have learned to do something rather uncommon in the field of education. They have learned to work directly with each another in one classroom and to support each other as colleagues in that endeavor. This has fostered the opportunity of unrestricted professional growth. On a daily basis there are opportunities for teaching innovation and professional renewal. Complementary expertise and teaching philosophies are shared and then incorporated into action. There is constant critique and self-examination that allows for an upgrading of each teachers' pedagogical repertoire. The ongoing effect is a joint effort that reaches more students - and with higher expectations! And that is the most noteworthy outcome. When a general and special educator meld their expertise there is more content delivered through effective and efficient process. There is more teaching and learning, more reinforcement of skills, more explanation, and more monitoring of progress and development. In sum, the educational process is taken qualitatively and quantitatively to a higher level. Teachers cannot do it alone, however. In order for the collaborative teaching model to succeed and grow there must be a system in place to enable the program to work. Largely that system is framed by the principal of the school, but s/he does not have total control over the multitude of variables that have a bearing on the program. Nevertheless, there is much that occurs under his/her leadership.

So important is an effective and supportive principal to the collaborative teaching model that anything less portends failure and potential educational disaster. S/he can use all energies to make sure that there is logical scheduling, adequate planning time, reasonable classroom composition, teachers willing to participate, and ongoing training. When all these elements of the system are implemented successfully then the system can move forward and serve students appropriately. In addition, the principal has a higher calling. S/he is the guardian of the integrity of the system which is complex and dynamic, and has far-reaching impact on the culture of the school. It is not an easy role because the integrity of the system is fraught with difficult issues.

According to the subjects of the study, the integrity of the system can be ensured only if the following issues can be tackled effectively. First, a key assumption of the system is that collaborative teaching should not be used as an "educational dumping ground". Mixed together in that assumption is the notion that there is only a reasonable number of students with disabilities that can be accommodated in one collaborative class. Numbers beyond reason put undue pressure on teachers, students, and the delivery service system. Numbers alone do not tell the entire story, however. There needs to be careful planning to find the right mix of students to help make the class effective. There must be a suitable number of students who model good academic and social behavior. Moreover, there should be students who are bright enough to raise the level of curricular challenge, as well as be good peer tutors if they are needed. Most important, students who are not fitting to the collaborative teaching concept should not be included in a collaborative class.

Consistently, the data show that the collaborative class is not designed for the relatively few students whose behavior is too severe, whose academic needs are too demanding, or whose disability is too much of a burden to work with in that particular educational environment. It must be remembered that the collaborative classroom is not typically a "full inclusion" classroom, and the resources are not commensurate with those needed in full inclusion environments. Therefore, it is necessary to realize that all students do not fit in collaborative classrooms and some need more restrictive educational settings.

This, in turn, points to another important issue seen in the data. The second key issue is that collaborative teaching should not be an "all or nothing proposition". It should have its place in the continuum of services for students with disabilities, but it should not be the only option. When collaborative teaching is the only option of serving students with disabilities, it defies the principle of the "least restrictive environment" mandated by federal law. There should be self-contained classes if needed, resource room programs, as well as mainstreaming in general education classrooms. Without options, there is little flexibility in programming and little hope of fully meeting the needs of students with disabilities in delivering "an appropriate program".

There are no short cuts to staffing as well. If students with disabilities are to be educated adequately then the requisite number of staff have to be in place to carry out the program. Collaborative programs cannot be panaceas to budget problems. Too often "teachers are spread too thin" in their roles as collaborative teachers. That statement was the most frequently cited statement heard during the data collection. There simply are not enough collaborative teachers hired to fill the need in most, if not all, schools. The result is less contact time for teachers "to team" in a given class. Less time to carry out the goals inherent to a collaborative situation. It is a shame when a second teacher is so infrequently in a classroom that a collaborative team wonders out loud if they are misrepresenting their situation by calling their class a collaborative one.

A third point seen consistently in the data is embedded in the question - what happens next? Next refers to placement in the next grade or placement at the next educational level. If collaborative teaching is the placement-of-choice designated by an individual educational plan how can that option be absent when considering the next placement? It is important for the collaborative teaching model to be available for the next placement and that another option such as resource room or mainstreaming not be the only choice. Moreover, if a collaborative classroom is the placement most fitting to the student and denoted in an Individual Educational Plan (IEP) one must question if it is not the obligation of the school division to furnish that placement each year. It would seem that school divisions are legally at-risk without the collaborative teaching option for each grade and each educational level once they have committed themselves to that service delivery model.

The belief about collaborative teaching is that it works, but it is not perfect. As pointed out in the results section entitled "Time", the element of time is an important element in the success of any school-based program. But there are some recurring issues that never really get resolved (although they might get better) no matter how much time elapses. Planning is a crucial element for collaborative teaching. When it is occurs its effects prove very fruitful. When it is absent there are many "missed opportunities" in the collaborative class. This is also true of training. It is unfortunate that some teachers often embark on an honest attempt to serve students without adequate training in the multifaceted aspects of collaborative teaching. If school divisions and their respective schools are to embrace fully the concept of collaborative teaching, there needs to be ongoing and systematic efforts to train collaborative teachers.

On the other hand, collaborative teaching seems nearly perfect to the parents of special education students. They have clearly made their positive thoughts known. Their resounding endorsement and enthusiasm for the model is quite noteworthy. It seems that collaborative teaching is a perfect fit in terms of their expectations and their children's needs. A lot of parents of general education students have voiced their happiness with the program as well. If there is a concern it has to do with the perception of curriculum depth and pace of instruction for particularly bright students. This is a very real concern of parents that needs to be thought through and acted upon.

The most curious finding of the study is how collaborative teaching is presented to parents. It is shocking to learn how little parents know about the program beyond the fact that there are typically two teachers in a classroom. In particular, the parents of general education students seem to have a definite lack of information and understanding about collaborative teaching altogether. In some cases, the most they ever heard of the program was when they were queried in this research effort. This raises the question - why?

Collaborative teaching is a concept that reflects a new era with far-reaching implications for administrators, teachers, students and parents. With the success and growth of the program, it seems that collaborative teaching will take its rightful place as an efficacious service delivery option for students with disabilities - and not a moment too soon.

This research has shown that a "keep-in" rather than "pull-out" program can have a multitude of benefits for all those who are exposed to it. Its ultimate impact may not be known for quite some time, however. The idea is too new, and it is difficult to know what its effects would be if it was fully adopted. In the interim there is reason to believe that in philosophy and practice collaborative teaching has come of age, and it has its best days ahead of it.

## General Recommendations

The study group, after reading the research report, convened in order to formulate recommendations to the field. They are listed below as general recommendations and training recommendations. They are not rank ordered, however.

1. LIMITS. Schools should be mindful that there are limits to the effectiveness of the collaborative model when resources are overtaxed. Therefore, there should be a limit on the number of special education students in a collaborative class. Limits, however, should not necessarily be set by percentage, ration or disability category. The criteria of "academically-able" should be a chief consideration irrespective of disability, but students should be included commensurate with individual classroom resources. Furthermore, collaborative classrooms should not be treated a "dumping grounds" for non-eligible for special education students with special needs and slow learners.

2. MULTIPLE SERVICE DELIVERY OPTIONS. Collaborative classes should be only one option available to students with disabilities in the appropriate education a continuum of services should exit including self-contained classes, resource rooms, and mainstreaming environments. In some cases special education students might be part of a collaborative classroom (primarily) but also attended a resource room for more intensive work. Moreover, this will also allow for students with more severe disabilities to be educated in more restrictive educational settings.

3. PLANNING TIME. Effective collaborative teaching is predicated on planning time for

collaborating teachers. Planning times should be given priority for all schools - elementary, middle and secondary levels. It is thought so important that administrators should consider allowing collaborative teachers to be free of various school-wide duties (i.e. bus, lunchroom) in order to have planning time.

4. PROGRAM EVALUATION. Collaborative teaching programs should be evaluated formally and systematically by administrators and teachers on an annual basis. In addition, views about the program should be solicited from parents of general and special education students and participating students themselves.

5. FEEDBACK ON SUCCESS. The success of collaborative teaching programs should be reported formally to the general faculty, parents and the public. In this way the entire school community becomes knowledgeable about this school-wide program, and it engenders interest, support and concern.

6. PROGRAM CONTINUATION. Students and their parents should be assured that the collaborative teaching program will be continued at the next grade level and at the next educational level. Elementary, middle and high schools should cooperatively plan for a well-articulated collaborative teaching program through the grades. Furthermore, they should agree on curriculum that, at a minimum, will be offered in each grade level (i.e. English, mathematics, language arts) throughout the educational continuum. Individual schools should decide whether they want to offer collaborative classes beyond those subjects.

7. DEFINE COLLABORATION. There should be a minimum amount of time and effort that collaborative teams spend collaborating in the classroom for a program to be truly a collaborative classroom. This criteria can be identified in hours, percentages and meeting IEP goals. Absolute standards are difficult to establish. Therefore, at a minimum, criteria for "true collaboration" should be set by schools and/or collaborative teams on a priori basis and be judged according to that standard.

8. PARENT INFORMING. Parents whose children are in collaborative classes should have the program thoroughly explained to them prior to or at the beginning of the school year. Special education parents should have opportunities to know more about the program than information provided at IEP conferences. General education parents need information about all aspects of the program as well. Printed material should be available that explains the goals and objectives of the program and other pertinent information about the collaborative teaching system. (Also, see training recommendations.)

9. STRATEGIC SCHEDULING. Scheduling is crucial to the success of the collaborative teaching model. Putting the student first should drive the process. This precept is necessary to protect the integrity of the program. Scheduling should be done after a thorough identification of individual student profiles and needs are developed. Only then can issues such as student mix, reasonable numbers, and number of collaborative teams (to name some) be planned for adequately.

10. VOLUNTARY PARTICIPATION. It is important that teachers collaborate on a voluntary basis. When teachers are forced into collaborative roles it undermines the basis for the collaborative program in general and the collaborative relationship of the teachers in particular. It is imperative that teachers participate in the collaborative program voluntarily. Furthermore, it is important for teachers to be matched as teams with a sense of compatibility including teaching philosophy and teacher style.

## Training Recommendations

1. FIRST-TIME COLLABORATIVE TEACHERS. Because collaborative teaching is a role that takes a variety of complex instructional and interpersonal skills it is important that first-time collaborators be trained prior to entering a collaborative classroom. Thee should be a set of prerequisites accomplished through training and teachers should not become collaborative teachers before they are accomplished.

2. NEW ADMINISTRATORS. Because the success of a collaborative teaching program is predicated in large part on the support of building administrators, new administrators should receive training in order to understand the many facets of the program.

3. GENERAL EDUCATORS. Schools where collaborative teaching programs occur should have an annual training session for all faculty to discuss the progress of the collaborative teaching program and foster support for it. Also, the training should have as a goal the recruitment of faculty as future collaborative teachers.

4. GUIDANCE COUNSELORS. Guidance counselors should be thoroughly trained about the goals and specific objectives of the collaborative teaching program. This training will be helpful to them when they formulate or assist in the formulation of the master schedule. In addition, guidance counselors should be made aware of the growth of collaborative classes (in student numbers) as the year progresses and the impact of that growth on the collaborative class.

5. PARENTS. Parents of both general and special education students need to know more about the collaborative teaching program and its impact on their children. In this way there is more potential for parental participation and monitoring of their child's educational progress. It is advisable that a series of training workshops be given throughout the school year about the collaborative program. In no way should written material developed for informational purposes substitute as training.

6. UNIVERSITIES. In their role as trainers of pre-service and in-service teachers, universities should incorporate in their training skills needed to work in collaborative teaching situations. This may be done via new course development or maybe interspersed in existing general education and special education course work.

# References

Affleck, J.Q., Madge, S., Adams, A. & Lowenbraun, S. (1988). Integrated classroom versus resource model: Academic viability and effectiveness. Exceptional Children, 54, 339-348.

Bauwens, J. Hourcade, J. & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. Remedial and Special Education, 35 (4), 19-24.

Krueger, R. A. (1994). Focus groups. Thousand Oaks, CA: Sage.

Lowenbraun, S., Madge, D., & Affleck, J.Q. (1990). Parental satisfaction with integrated class replacement of special education and general education students. Remedial and Special Education, 11, 37-40.

Madge, S., Affleck, J.Q. & Lowenbraun, S. (1990). Social effects of integrated classroom and resource room/regular class placement on elementary students with learning disabilities. Journal of Learning Disabilities, 23, 439-445.

Miles, M. B. & Huberman, A. M. (1984). Qualitative data analysis. Beverly Hills, CA: Sage.

Stewart, D. W. & Shamdasani, P. N. (1990). Focus groups: Theory and Practice. Newbury Park, CA: Sage.

Parrott, P., Driver, B., & Eaves, D. (1992). Collaborative teaching must be a collaborative venture. Presented at the Virginia Council for Learning Disabilities Conference, Roanoke, Virginia.

# APPENDIX A

## MERC COLLABORATIVE TEACHING RESEARCH PROJECT
## IDENTIFYING DATA SHEET

SCHOOL____________________________
LEVEL______________________________
COUNTY____________________________
POPULATION OF SCHOOL (NO.)_________

1) How long has the collaborative teaching program existed in this school?

2) What grades, subjects, and course levels are involved with the collaborative teaching program?

3) What categories of students with disabilities are served in your school?

4) What percentage of students with disabilities are served in the collaborative teaching program?

5) What is the average ratio of special education students to regular education students in the collaborative classroom?

6) What percentage of regular education teachers are involved in the collaborative teaching program?

7) What percentage of special education teachers are involved in the collaborative teaching program?

8) Was there any training prior to the implementation of this model? Please explain.

**School**____________
**No.**_______________

7) How have teaching strategies of collaborative teacher teams changed as a result of this model?

8) What characteristics do good collaborative teachers possess?
**Probes:** -parity
-different content and process

9) Do state standards for staffing special education facilitate the use of the collaborative model? Or hamper?

10) What type of staff development was completed prior to, and is ongoing using this model?

11) What are the parents' perceptions of the effectiveness of the model? Has it changed over time? How?

## TEACHER QUESTIONS CATEGORIES

School_______________________________
No. of participants in focus group________

### 1.STUDENT IMPACT

How effective is the collaborative teaching model for special education students? For regular education students?

**Probes:** -student learning

-behavior

-motivation

-attitude

-attendance

### 2.TEACHER IMPACT

From the regular education perspective, what are the advantages and disadvantages of collaborative teaching? From the special education perspective, what are the advantages and disadvantages of collaborative teaching?

### 3.NECESSARY ELEMENTS

What are the necessary elements of a successful collaborative classroom?
**Probes:**
3.1 Are there particular teacher characteristics that facilitate the use of the collaborative model? Is there a certain level of parity of teaching skills required to mold a successful team? Does it help if teachers have different process and content skills?
3.2. What support do you need from administrators?
3.3 What type of staff development is helpful for an effective collaborative teaching program?

School________________________________

No. of participants in focus group______

## 4.PERCEPTION OF PARENT FEELINGS

How receptive have parents been to this model? (special vs. regular education)

**Probes:**

4.1 What are the concerns of regular education parents in regard to the collaborative model? The special education parents? Are these concerns warranted?

4.2 Has parental opinion changed during the use of this model?

## 5.ISSUES

Are there any other issues, comments, or concerns you wish to bring up regarding collaborative teaching?

## STUDENT QUESTIONS

**School**________________________________
**No. of participants in focus group**________

1) Do you like having two teachers in your classroom?

2) What are the advantages and disadvantages of having two teachers in your classroom?

3) Thinking of your collaborative class (not the class with one teacher):
Are your grades better? Y/N Why?

Do you get enough attention Y/N Why?

Do the students in your class behave better? Y/N Why?

Do you feel more sure of yourself? Y/N Why?

Is it easier for you to remember things? Y/N Why?

Do you feel more organized? Y/N Why?

Do you enjoy coming to class? Y/N/ Why?

Do you find it easier to work on your own? Y/N Why?

Are you learning new ways to help you do your work? Y/N Why?

Do you find it easier to do homework for you collaborative classes? Y/N Why

4) Would you like to be in a class like this one next year?

## PARENT QUESTIONS

**School**__________________________________
**No. of participants in focus group**____________

1) What is your understanding of the collaborative teaching **classroom?**

2) What impact has the collaborative teaching model has on you child?

**Probes:**
- -learning
- -attention
- -behavior
- -grades
- -organization
- -skills
- -motivation
- -retention
- -confidence

3) Compare your child's experience in a collaborative setting to a non-collaborative setting?

**Probe(wait):** - Discuss advantages and disadvantages

4) Any additional issues, comments, or concerns regarding the collaborative program not already mentioned?

# APPENDIX B

# THE EFFICACY OF THE COLLABORATIVE TEACHING MODEL FOR SERVING ACADEMICALLY-ABLE SPECIAL EDUCATION STUDENTS

## REVIEW OF LITERATURE

Submitted by:

Paul J. Gerber, Ph.D
Virginia Commonwealth University
February 1995

# THE EFFICACY OF THE COLLABORATIVE TEACHING MODEL FOR SERVING ACADEMICALLY-ABLE SPECIAL EDUCATION STUDENTS

## Table of Contents

Executive Summary . . . . . . . . . . . . . . . . . . . . . . . . . . i

Introduction . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

The Collaborative Teaching Model . . . . . . . . . . . . . . . . . . 6

Research on Collaborative Teaching . . . . . . . . . . . . . . . . . 11

Conclusion . . . . . . . . . . . . . . . . . . . . . . . . . . . . 13

References . . . . . . . . . . . . . . . . . . . . . . . . . . . . 14

## Collaborative Teaching Research Study

## Executive Summary

Collaborative teaching is the latest attempt by the field of education to address the instructional needs of students with disabilities in the least restrictive environment. It is distinctive in design because the focus of the collaborative teaching concept is keeping students with disabilities in regular classes to be educated alongside their nondisabled peers (a "keep in" program versus a "pull out" program). In a collaborative teaching arrangement both regular and special educators use their coincidental and complementary skills to teach students with disabilities. Because of the diversity of learning arrangements needed in classrooms with students with disabilities, collaborative teaching is a flexible system of curriculum, instruction, and behavior management. It is dynamic and responsive to the individual needs of students with special needs.

Presently, collaborative teaching is used for a variety of students with disabilities. These students are considered mostly to be academically able. A large number are judged to be mildly disabled and the great preponderance of students come form the high incidence category - learning disabled. Collaborative teaching should not be equated with the concept of "full inclusion", although there can be some overlap. In theory, full inclusion is an administrative arrangement for serving all students with disabilities, whereas collaborative teaching is an instructional arrangement to meet the unique educational needs of academically-able students with disabilities in the regular classroom. The distinct difference is the disabled population to be served and the overall goals of individual educational programs. Full inclusion includes ALL students with disabilities - including students with severe disabilities.

Currently, there is a fair amount of writing done on the topic of collaborative teaching. But there is a paucity of research on the collaborative teaching model. Efforts to evaluate its efficacy have been limited. Even those who have written extensively about the model have not fully researched its short, intermediate or long-term effects. Preliminary data have shown positive views from teachers, students, and parents.

## Review of Literature

### Introduction

Since the passage of Public Law 94-142, the Education of All Handicapped Children's Act, in 1975, the focus on service delivery to students with disabilities in schools has been education in the least restrictive environment (LRE). This precept of law stemmed from normalization, a movement borne in the 1960's which philosophized that people with disabilities should have an opportunity to lead as close to a normal life as possible (Wolfensberger, 1972). LRE emphasized the psychological and educational needs of students with disabilities as superordinate to the special education services they received. In essence, they were to fit into a continuum of services that ranged from segregation in special campus and self-contained programs (most restrictive environment) to integration in categorical or non-categorical resource rooms to mainstreaming programs (least restrictive environment). For the first time in the history of the field of special education the student's needs dictated the educational placement rather than the placement directing the student's program. It was the beginning of a series of systemic conceptualizations to serve students with disabilities which developed over the past twenty years and is evolving even to this day.

This change in human service philosophy meant that for the first time children and youth were not automatically segregated simply on the basis of disability. They were to find their way into educational environments that brought them into contact with students who were not disabled. This change necessitated new paradigms of cooperation and collaboration between regular and special education teachers. The model of instruction that posed the greatest challenge was mainstreaming. Here special education students who could benefit academically from the regular classroom instruction and socially from interaction with nondisabled peers were educated in the "mainstream". This was the ideal in the movement and the goal of all programming for students with certain disabilities.

Through the latter part of the 1970's and throughout the decade of the 1980's mainstreaming in regular classes (whether all of the day or part of the day) became the model of choice. Programmatically it was fueled by the fiscal concerns of school district administrators. The confluence of these thoughts became the catalyst for innovation and experimentation in delivery of service models in special education. This result was very important. The net effect of the federal law in 1975 was more students being educated the majority of their school day in the regular classroom. This precipitated numerous teacher support models such as: teacher consultant, educational strategist, diagnostic-prescriptive teacher, crisis-resource teacher, and assessment teacher. In all these models the special education teacher was the expert about exceptionality and consulted with regular education teachers on instructional and behavioral issues. In some cases (depending on the design and philosophy of the school division) students would be "pulled out" of their mainstream classrooms and be educated in a special education resource room. Other students would stay in their regular classroom placement for the entire school day. This was true of students at all levels of education- elementary, middle, and secondary.

In 1986 amidst the climate of educational reform sweeping the country, the Assistant Secretary of the U.S. Department of Education, further energized the notion of shared responsibility of students with disabilities through a controversial proposal of an integrated system of services. The concept was called the "regular education initiative" (REI). The reason for REI stemmed from several concerns (Hunt & Marshall, 1994). All students with disabilities were not benefitting from the existing system. The process of decision-making about the needs of students with disabilities was making adversaries of parents and teachers and, the empirical evidence was mounting that impugned the efficacy of special education classes.

REI triggered many administrative changes in the education of academically-challenged special education students through an emphasis on regular classroom placement irrespective of severity of disability. It, for all intents and purposes, made the continuum of most restrictive to least restrictive placements obsolete. Its premise was viewed as a radical departure from traditional thinking of serving special education students. Paramount in REI's philosophy were collaborative efforts of both regular and special education teachers in order to marry their talents in the teaching of students with disabilities in mainstream settings. The Assistant Secretary of the U. S. Department of Education espoused the view that special education students would be better served and successfully taught in an REI model because it merged the roles of regular and special educator. This position engendered a great amount of debate on both sides of the issue (Maheady & Algozzine, 1991; Kauffman, Gerber, & Semmel, 1988).

While the effects of REI took hold in the field, another issue developed out of the confluent themes of LRE, REI, and mainstreaming. The debate about mainstreaming as a viable delivery of service option had always primarily centered around students with disabilities who were thought to be able to succeed academically with program supports. "Full inclusion" was thrust into the educational arena by professionals who worked with students with a wide array of severe disabilities (i.e. mental retardation, dually diagnosed disabilities and multiple disabilities). These disabilities posed great challenges for integration in a regular classroom because the special needs of these students were not always focused on academically-related issues. In fact, part of the goal of full inclusion was socialization with nondisabled students and being part of a classroom ecology where students approximate normal models of behavior and interaction. Those who argue vehemently for the concept of "full inclusion" believe that all students with disabilities should be educated in the mainstream for those reasons, irrespective of severity of disability or complexity of needs.

In effect, full inclusion negates the continuum of educational services (options of service delivery) that were developed over the past two decades to serve the diversity of needs of students with disabilities. More specifically, it renders useless more restrictive special education environments. It also has a variety of implications for the roles of special educator and regular educator as well as the goals of regular education and special education (Stainback & Stainback, 1993). At a minimum it does, however, approach the ideal of normalization which has been the driving force of various efforts to integrate disabled and nondisabled children and youth over the past 25 years.

As one traces the progression of special education services from the inception of P.L. 94-142 and through its reauthorization as P.L. 101-476, the Individuals with Disabilities Act (IDEA), several patterns emerge. First, all special education students have moved closer to the mainstreaming over the years. Currently, the majority of students with disabilities in the United Stated are educated in regular classrooms. Second, this has put more responsibility on regular education teachers at all educational levels to educate students with special needs. Third, collaboration between special education teachers and regular education teachers has become important in order to teach students with disabilities in their cognitive and affective growth.

## The Collaborative Teaching Model

Facing the realization that more students with disabilities are to be educated in the mainstream, various models of collaboration and cooperation between regular and special education have developed. Most prominent of the models of collaboration is the collaborative teaching model (Bauwens, Hourcade, & Friend, 1989). Collaborative teaching has been defined as "an educational approach in which general and special educators work in a co-active and coordinated fashion to teach jointly heterogenous groups of students in educationally integrated settings (i.e. general classrooms)....In cooperative teaching both general and special educators are simultaneously present in the general classroom, maintaining joint responsibilities for specified education instruction that is to occur within that setting (p. 18). This theoretical definition has been operationally defined by Parrott (1989) after extensive experience with the model as it is implemented at the school division level.

"Collaborative teaching is an approach to education whereby general and special educators voluntarily agree to maintain joint responsibility for educating special education students within general education classrooms. This combines the expertise of each individual teacher, whose training and experience are very different, to create a teaching team of extremely high caliber" p.3.

In essence, the general educator shares expertise in all aspects of curriculum, effective teaching, and large group instruction. The special education teacher contributes knowledge in such areas as learning styles and strategies, clinical teaching, and behavior management. In total, the team works together to create a learning environment in which all students can learn from a multiplicity of instructional and behavioral techniques. This model is implemented via several different arrangements including: 1) team teaching, 2) complementary instruction, and 3) supportive learning activities. These three elements of collaborative teaching are explained by Parrott, Driver, & Eaves (1992).

"Team teaching involves both teachers in teaching the content material. They may coordinate daily instruction, with one teacher reviewing or setting the stage for new instruction, the other teaching the new skill. Educators may divide responsibility for teaching the curriculum, either on a consistent basis or varying from one unit to the next. Shadowing may also occur, when a teacher rephrases or presents instruction in a different way to clarify information for the students. Team teaching can be implemented in both large and small group instruction."

"Complementary instruction is the arrangement in which the expertise of the special educator is best utilized within the co-taught class, the arrangement which truly sets co-teaching apart from other teacher-teaming situations. After the instructional needs of students are assessed and the content to be taught by the general educator is determined, special educators carefully plan and implement instruction to supplement the regular curriculum. The supplemental instruction provides for all at-risk students, including those who are disabled, the academic and survival skills necessary to be successful with the curriculum."

"Supportive learning activities are developed by teachers to allow students to become actively involved in the reinforcement of skills and content. These can be viewed as creative alternatives to seatwork. For the special educator who does not feel comfortable teaching content, taking responsibility for developing and implementing supportive learning activities is often chosen as a means for establishing him/herself as a teacher in the general education classroom. Conducting cooperative learning centers for independent or small group reinforcement are examples of the responsibilities often assumed by the special educator in a co-taught class." p.4.

These in-class instructional arrangements have been delineated further by Cook & Friend (in press) into a five structure model: 1) one teach, one assist, 2) station teaching, 3) parallel teaching, 4) alternative teaching and, 5) team teaching. Each structure is explained below.

1) One teach, one assist- both teachers are present, but one - often the

general education teacher - takes the lead. The other teacher observes or "drifts" around the room assisting students.

2) Station teaching- teachers divide the content to be delivered, and each takes responsibility for part of it. Some students may also work independently. Eventually all students participate at all "stations".

3) Parallel teaching- teachers jointly plan instruction, but each delivers it to half of the class group.

4) Alternative teaching- one teacher works with a small group of students to pre-teach, re-teach, supplement, or enrich while the other teacher instructs the large group.

5) Team teaching- both teachers share the instruction of students. They take turns leading a discussion, demonstrate concepts or learning strategies, and model appropriate question-asking or conflict resolution behavior.

Because of the dynamic relationship of collaborating teachers and the need for flexibility to meet a wide diversity of educational needs, all these arrangements can be utilized in a collaborative classroom from activity and/or period to period in a given school day.

Whereas inclusion is an administrative concept, collaborative teaching is instructional by design. Its process acknowledges that the mode of instruction is "keep in" rather than "pull out" as contrasted by many of the past educational services to students with disabilities. It also has other benefits. The presence of a regular classroom also serves as a preventive mechanism for students who are at-risk for school failure. Moreover, not all students referred for special education services are eligible to receive them. They, however, can benefit from the collaboration of teachers to address their academic and social problems. Ultimately, the collaborative classroom becomes a setting where education can be delivered to students with a wide diversity of learning and behavior profiles. In addition, there is increased job satisfaction, reduced stress, enhanced stability, and increased teaching/learning potential (Bauwens, Hourcade, & Friend, 1989). Results of related research in this area show academic viability, augmented self-esteem and less stigmatizing social effects, and general parental satisfaction with an integrated model as opposed to a "pull out" special education model (Affleck, Madge, Adams, & Lowenbraun, 1988; Lowenbraun, Madgem & Affleck, 1990; Madge, Affleck, & Lowenbraun, 1990).

## Research on Collaborative Teaching

To date most of the writing about the collaborative teaching model has focused on the model in toto and its components, the new paradigm of regular and special education cooperation, and how to implement a collaborative teaching program. Despite its gaining popularity the process has not been thoroughly researched nor has its efficacy been judged. A few studies on collaborative teaching have been published. One of the studies focused on various aspects of collaborative teaching as it was implemented in four ( three high schools and one middle school ) of thirty secondary schools in Anne Arundel County, Maryland (Walsh, 1991). A survey was designed to compare a one year co-teaching experience with the previous year's special education placement experience. Those who responded to the survey were pairs of co-teachers, building administrators, special education students, and parents. Results showed that special education students, cooperative teachers, and parents preferred the collaborative teaching model to the previous year's "pull out" experience. The special education students felt they learned more, enjoyed school more, had adequate time to finish their work, felt free to ask questions, and liked receiving special education services in regular classes instead of separate special education classes. Moreover, teachers and parents reported that their children seemed to try harder, learn more, receive more homework and schoolwork in collaborative classes.

In another study of a pilot collaborative teaching project in the Pacific northwest United States Bauwens, Hourcade, & Friend (1989) found after a year of training and implementation that 46 general and special educators felt increased satisfaction (special educators more), reduced stress and burnout (special educators more), enhanced stability (special educators more), and increased teaching/learning potential (general educators more). In addition, Bauwens et al. (1989) surveyed participants of cooperative teacher training workshops to identify 30 potential obstacles. The three items selected with greatest frequency were time, cooperation and increased workload. However, the authors pointed out that these issues may not be potential barriers after field-based practical experience and knowledge.

Friend and Cook (1992) conducted anecdotal research on collaborative teaching. After interviewing collaborative teaching teams they found that collaborative teaching was perceived as effective and enabled them to use a wide array of teaching techniques. Moreover, the model positively affected student achievement and the self-concept of students. Similar results were also found by White and White (1992) in a middle school study and Harris, Harvey, Garcia, Innes, Lynn, Munoz, Sexton & Stoica (1987) in a high school program.

## Conclusion

Collaborative teaching is the latest attempt to integrate students with disabilities into regular classrooms. Yet philosophically it is a break from past "pull out" models of special education services because it focused on keeping students with disabilities in the mainstream by recasting the role of the special educator and regular educator and restructuring their relationship. Because of the paucity of research, albeit generally positive in nature, the collaborative teaching model still needs empirical data on which to base an evaluation of its efficacy. There is no doubt that the goals of this model come closest to the ideal of normalization cast almost three decades ago. All important, however, are the outcomes of the students who have been educated via the collaborative model as well as the integrity of process and content of collaborative teaching's system of service delivery.

## References

Affleck, J.Q., Madge, S., Adams, A. & Lowenbraun, S. (1988). Integrated classroom versus resource model: Academic viability and effectiveness. Exceptional Children, 54 , 339-348.

Bauwens, J. Hourcade, J. & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. Remedial and Special Education, 35 (4), 19-24.

Cook, L. & Friend, M. (in press). Co-teach! Strategies for creating successful teaching teams.

Friend, M. & Cook, L. (1992). The new mainstreaming: How it really works. Instructor, 101 (7), 30-36.

Harris, K.C., Harvey, P., Innes, D., Lynn, P., Munoz, D., Sexton, K., & Stoica, R. (1987). Meeting the needs of high school students in regular classrooms. Teacher Education and Special Education, 10 , 143-152

Hunt, N. & Marshall K. (1994). Exceptional children and youth. Boston: Houghton Mifflin Co.

Kauffman, J., Gerber, M., & Semmel, M. (1988). Arguable assumptions underlying the regular education initiative. Journal of Learning Disabilities, 14 , 520-526.

Lowenbraun, S., Madge, D., & Affleck, J.Q. (1990). Parental satisfaction with integrated class replacement of special education and general education students. Remedial and Special Education, 11 , 37-40.

Madge, S., Affleck, J.Q. & Lowenbraun, S. (1990). Social effects of integrated classroom and resource room/regular class placement on elementary students with learning disabilities. Journal of Learning Disabilities, 23 , 439-445.

Maheady, L., & Algozzine, R. (1991). The regular education initiative: Can we proceed in an orderly and scientific manner? Teacher Education and Special Education, 14 , 66-72.

Parrott, P. (1989). The collaborative teaching program. Chesterfield, VA: Chesterfield County Public Schools.

Parrott, P., Driver, B., & Eaves, D. (1992). Collaborative teaching must be a collaborative venture. Presented at the Virginia Council for Learning Disabilities Conference. Roanoke, Virginia.

P.L. 94-142. The Education of All Handicapped Children's Act. February, 1974.

P.L. 101-476. Individuals with Disabilities Education Act. January, 1990.

Stainback, W., & Stainback, S. (1993). Controversial issues confronting special education. Boston: Allyn & Bacon.

Walsh, J. (1991). Student, teacher, and parent preference for less restrictive special education models - Cooperative teaching. (ERIC Reproduction Service No. ED 333 664). Paper presented at the Annual Conference of the Council for Exceptional Children, Atlanta, GA.

White, A.E., & White, L.L. (1992). A collaborative model for students with mild disabilities in middle schools. Focus on Exceptional Children, 24 ( 9), 1-10.

Wolfensberger, W. (1972). Normalization. Toronto: National Institute on Mental Retardation.

Will, M. (1986). Educating children with learning problems: A shared responsibility. Exceptional Children, 52 , 411-416.